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THE CHEMISTS' AND DRUGGISTS' DIARY for 1888 is now being circulated, and every subscriber in the United Kingdom to whom December copies are due should receive a copy in the course of the current week, or at the latest in the early part of next week. Subscribers wishing to have extra copies are requested to send for them early. To them the price is 2s. 6d., with or without delivery; to non-subscribers the price is 3s. 6d.

## DIARY FOR NEXT WEEK.

## Monday, December 5.

Society of Chemical Industry; London section at 8 P.M.  
Professor Dewar on "The new Weldon-Pechiney process for the manufacture of Chlorine from Magnesium Chloride."

Royal Institution; General Monthly Meeting at 5 P.M.

## Wednesday, December 7.

Edinburgh Chemists' Assistants' and Apprentices' Association at 9.15 P.M. "Notes and Queries."

Society of Arts at 8 P.M. Mr. P. L. Simmonds on "The Chemistry, Commerce, and uses of Eggs of various kinds."

## Thursday, December 8.

Chemists' Assistants' Association at 9 P.M. Mr. S. R. Atkins, J.P., will deliver an address.

## Suggestions.

(We invite contributions to this column.)

A VERY useful polishing powder for metals and glass is made of very finely-ground glass mixed with a small proportion of dried soda ash.

THE most effective show-tablets for a chemist's window are opal glass with black lettering. Being translucent, they look as well by gaslight as by daylight.

A COMPOSITION FOR LINING VESSELS has been patented in the United States. It is composed of beeswax, paraffin, indiarubber, red lead, and litharge.

LINIMENT.—A mixture of the essential oils of mustard, origanum, sassafras, together with capsicum and sulphuric ether and extract of red clover, is recommended as a liniment.

AN IMPERVIOUS ENAMEL for paper, wood, &c., proposed by an American inventor, is a solution of shellac in methylated spirit. A coating of this is applied, and then another coating laid at a high temperature and under great pressure.

IT may interest microscopists to know that the zinc double salt of tetramethyldiamidodiphenylthiénylcarbinol, otherwise thiophen green, is excellent for staining sections, especially as a contrast colour to carmine. It is soluble in water, alcohol, and chloroform.

THE oil of *Tanacetum vulgare* produces in rabbits and similar animals symptoms remarkably like rabies. So Peyraud discovered by injecting it into the veins of the poor creatures; but the bearing which the experiments have upon human ills has yet to come.

THE silky fibre or silk-cotton, obtained from the pods of the *Eriodendron anfractuosum*, a plant common both in the East and West Indies, has been found to make the finest colloid possible for surgical purposes. Where is the fibre to be got?

SYRINGING of the ears is sometimes provocative of coma, probably, as Dr. Middlemass Hunt explains it, owing to a nervous reflex starting either from the terminations of the auditory nerve in the semicircular canals and labyrinth or from the tympanic plexus.

ACCORDING to MM. Errera, Maistran, and Clautrian, alkaloids in the majority of cases occur in the interior of cells and not in the cell walls. They are to be regarded as waste products, but the plant is capable of again utilising them in the formation of albuminoids.

CHLORAL CAMPHOR, with a drop of hydrochloric acid and a few drops of peppermint oil, gives a red colour, which becomes violet blue on heating. From that colour on diluting it passes through green to a blood-red fluorescence.

VANILLIN is not a satisfactory substitute for vanilla, according to several American pharmacists. Even when coumarin is added to the essence the flavour gradually becomes weaker.

COUGH REMEDY.—A compound made from anodyne balsam (including soap, opium, camphor, oil of rosemary, and alcohol) one-half part, by weight, Friar's balsam, 1 part, by weight, and spirits of lavender, 1 part, by weight, mixed together, and sweetened. A patent for this has been applied for in the United States.

A CREAM FOR CHAPPED HANDS, which is far superior to many of the similar advertised products, is made as follows:—Quince-seed, 3ij.; rosewater, Oiv.; glycerine, Oij.; tr. benzoin, 3ij. Macerate the quince-seed in the rosewater for twenty-four hours. Strain, and add the glycerine and tr. benzoin.—*Drug. Bull.*

PERMANGANATE OF POTASH is recommended by Dr. Hawack as a remedy for snake-bite. His mode of procedure is to inject a solution of the salt hypodermically above the seat of the wound, and apply it also directly to the injured spot. Hot fomentation should be used to cover the application, and ammonia or any alkali available administered internally also. The strength of the permanganate solution is said to be 1 in 6. This will certainly destroy the human tissue, if not the snake-poison.



## Metropolitan Reports.

**THE LONDON COMMERCIAL TRAVELLERS' BENEVOLENT SOCIETY.**—Mr. T. C. W. Martin, of Messrs. S. Maw, Son & Thompson, presided at a smoking concert of this society, held at the Cannon Street Hotel, on Friday, November 25. About 500 gentlemen were present, chiefly commercials. They had a first-rate programme of instrumental and vocal music, which was greatly enjoyed. At 10.45 the concert terminated with the National Anthem.

**NOT PROPERLY MARKED.**—At the Guildhall on Tuesday Fredk. L. Page, of 101 Leadenhall Street, was charged, as the owner of a case of eau de Cologne passing upon the Great Western Railway, for giving a false account of the goods with the intent to evade the payment of 2s. 8d. toll. The defendant pleaded guilty, and said the consignee had asked him to mark it "Soap," and he had done so, not thinking that he was doing any harm. A fine of 5l. was imposed.

**POISONING WITH PHOSPHORUS PASTE.**—Mr. W. E. Baxter held an inquiry on November 25, on the body of Jane Bridge, nineteen, domestic servant. The evidence showed that deceased had been found wandering in the streets apparently ill. She was taken to the Bridge of Hope Mission Refuge and was treated kindly, but she was unable to eat food, and she explained this by stating that she had taken poison. According to a nurse who attended the deceased, she (deceased) told her she had first taken some liniment, but as that did not kill her, she afterwards bought some rat-poison in Bethnal Green Road, and took it. Dr. William Steer corroborated. She died on Tuesday, November 22, from the effects of some irritant poison, and the symptoms were consistent with phosphorus-poisoning. A verdict was returned accordingly.

**THE CHARGE OF POISONING WITH CHLORIDE OF ZINC.**—At the Central Criminal Court last Saturday, Edward Allam, a signalman on the Great Northern Railway, was charged with maliciously administering to William Racher a certain poison, with intent to do him grievous bodily harm. The particulars of the case have been fully reported in this journal of November 12. The evidence showed that he had put some battery solution in the water-filter. Mr. A. N. Gow, analytical chemist, afterwards found that the water in the filter contained 134 grains of chloride of zinc and a little free hydrochloric acid. With this Racher had made some cocoa for himself, and he suffered from irritant poisoning. The jury found the prisoner guilty, and Mr. Justice Smith directed Allam to enter into his own recognisances in 50l. to keep the peace and to be of good behaviour, and said that if he behaved well he would hear nothing more about the matter.

**THE ROYAL SOCIETY.**—The anniversary meeting of the Royal Society was held on Wednesday, when the President, Professor George Gabriel Stokes, gave an address, briefly commenting on the events of scientific interest during the year. The Society's medals for the year were presented as follows:—The Copley Medal to Sir J. D. Hooker for his services to botanical science as an investigator, author, and traveller; a Royal Medal to Colonel Clarke, R.E., for his comparison of standards of length and determination of the figure of the earth; a Royal Medal to Professor Moseley for his numerous researches in animal morphology, and especially his investigations on corals and on peripatus; and the Davy Medal to Mr. John Newlands for his discovery of the periodic law of the chemical elements. The officers and council for the ensuing year were elected, the gentlemen being those whose names were printed on November 12. Professor Stokes did not resign.

**THE GLOBE DRUG COMPANY.**—George R'Eno, thirty, was tried at the Central Criminal Court on Saturday and Monday, upon an indictment charging him with obtaining money by false pretences. The facts have been previously reported in this journal. R'Eno's victims were applicants for the secretaryship to the London and Globe Drug Company, which R'Eno had promoted; and by stating to several of them that their applications had been favourably entertained by the directors, he obtained security deposits from them. The defendant, in defence, contended that he had throughout acted in perfect good faith, and he denied that he had made

any misrepresentations. The Recorder, in summing up, pointed out that prospectuses were issued, and there was, up to June last, a directorate of the company. It was difficult to say, therefore, that there was not the slightest intention on the part of the defendant to form the company, and if that were so it altered the complexion of the case. A mere promise on the defendant's part to obtain the appointment would not be a false pretence. The jury found the defendant guilty on the charge of larceny by a trick. It was stated that on January 20, 1885, the defendant was convicted of conspiracy in the name of Regan. Mr. Bodkin, for the prosecution, stated that in the present case the money obtained amounted to 165l. Inspector Marshall informed the court that since 1884 the defendant had been connected with land, cattle ranch, and other companies. The Recorder sentenced the defendant to five years' penal servitude. The past history of R'Eno shows the nature of the man. He is not an American, although he gave out that he is so. He assumed a semi-American accent nearly three years ago, when he was engaged in promoting a cattle ranch company, with offices in Westminster. He represented that the cattle ranch in the United States extended to about 160,000 acres, and by various means obtained from different parts of England, Scotland, and Ireland horses, cattle, carts, and machinery for the purpose of stocking this great ranch. Instead of being sent to America the property was sold in London for what it would bring. For this offence the prisoner, who asserted that he was a *bona-fide* company promoter, was tried at the Old Bailey, and sentenced to a term of imprisonment. When he came out he started the bogus syndicate which has been the means of again putting him in prison. The police state that he is one of the most accomplished swindlers in London.

**JUBILEE LAMPS.**—A case was heard in the Lord Mayor's Court last week, in which the plaintiff, Mr. White, wholesale chemist, of Portsmouth, sued a Mr. Le Luca, a London dealer in lamps, for 37l. 18s. 8d. as damages for the non-fulfilment of a contract to supply him with a large quantity of Jubilee lamps. The plaintiff wished to score something out of the Jubilee by selling lamps for decoration, and he entered into a contract for the defendant to supply him with 30 gross of lamps, which were to be delivered at the very latest by Friday, June 17. Fourteen gross were sent on, but the remainder did not, however, come until late on the evening of Monday, the 20th, after the plaintiff had left his shop, and on the Jubilee Day business was practically suspended, when the goods could not be sold. The price went up very rapidly, and as much as 5l. per gross was being paid for them the day before the Jubilee, although the contract price was 10s. per gross. The plaintiff had employed thirteen boys to put candles into the buckets, and advertised in the local newspaper that he would sell the 30 gross he expected on Friday before Jubilee Day. The plaintiff thought 2l. 14s. per gross was a fair estimate for damage, that being what he considered he should have got for them. In defence it was contended that this price was excessive, and this view seemed to meet with the approval of the jury, who awarded Mr. White 10l. 10s. damages.

**USE OF LIQUORICE IN AMERICA.**—It is stated that an American tobacco manufacturer purchased 6,000,000 lbs. of liquorice from a Brooklyn house last year for use in his manufactures.

**AMERICAN SAFFRON,** which twenty years ago sold on the New York market at \$4.00 per lb., was worth recently \$0.11 per lb. only. In 1886, says the *Oil, Paint, and Drug Reporter*, the market price of American saffron, which previously had fallen to such figures as to compel growers in the United States to abandon the raising and gathering, declined to the then unprecedentedly low price of 12 cents per lb. The Mexicans, who succeeded their American neighbours as suppliers of the market, although they had the advantage of the cheapest of labour, found they could not gather and market the drug without loss, and so, instead of the usual crop of several hundred bales, but sixty or seventy were gathered last year. This year, again, next to none has been gathered, and a few weeks ago the price advanced 100 per cent. The failure of the crop for two successive years has not laid the New York market bare, however, for a few fortunate holders have a considerable supply.



## Provincial Reports.

*Items of news, and newspapers containing matters of interest to the trade, sent to the Editor, will much oblige.*

### BARNSTAPLE.

AN EXPLOSION of a curious nature took place on November 26 in the shop of Mr. James Partridge, chemist and druggist, High Street. As soon as the explosion occurred the shop was filled with fumes of a suffocating nature, and some articles in the shop caught fire, but the flames were subdued. It was then discovered that a jar containing about 10 lbs. of chlorate of potash which was upon the shelf had exploded. No great damage was done.

### BIRMINGHAM.

A SUM of 4,000*l* has been subscribed for the new Birmingham and Midlands Skin and Lock Hospital. Only 500*l*. is now required.

ON THE WAR-PATH.—The Inland Revenue are busily engaged with the local chemists, and at least three have to show cause why they will not have to pay the penalty of 10*l*. for selling unstamped proprietary articles.

GLADSTONE AND PHARMACY.—In the window of one of our chemist's shops is to be seen one of the Gladstone logs which the great statesman has recently begun to sell to his admirers.

MR. W. B. FEATHERSTONE, son of Mr. Featherstone, laboratory manager to Messrs. Southall Bros. & Barclay, has successfully passed in the first division for the final M.B. of the London University at the examination held last week.

NOT TOO SOON.—Last week the magistrates of a local court directed a well to be closed which Dr. Alfred Hill certified to be contaminated with 43 per cent. of sewage matter! It is surprising that a magistrates' order was required to do this.

BROOMS!—A chemist records his experience of the decoction of broom. Not having any in stock of the broom tops he went to a neighbouring *confreire* and asked to be obliged with a small quantity until his arrived, and he was told they did not keep them, but that he could procure them at the ironmonger's hard by.

THE BIRMINGHAM WORKHOUSE INFIRMARY consumed 217*l*. more drugs during the last financial year than in the year before. Yet along with this there has been a saving—sometimes amounting to 11*l*. in a single week—in medical extras or stimulants. Better hospital treatment and less stimulants has therefore come out as the policy for the future.

THE CASTNER SODIUM PROCESS is about to be worked on a large scale in the vicinity of Birmingham. It is stated that an influential company have acquired a piece of land at Old Bury, close to Messrs. Chance Bros.' alkali works, and upon this buildings are being erected. Aluminium will be the principal product, the sodium being utilised for this purpose.

MEASLES AND MARIGOLD TEA.—At an inquest held last week on the body of a child two years and seven months old, who had died from the effects of measles, the mother stated that all she had done was to give it marigold tea. Mr. Cheshire, M.R.C.S., stated that congestion of the lungs was the immediate cause of death. The usual verdict was returned.

LIMITS OF PRACTICE.—Two Birmingham doctors have settled their disputes before Mr Justice Chitty in the Chancery Division of the High Court of Justice during the past week. Mr. Drury had practised as a doctor at 221 Bloomsbury Street, Birmingham. In 1834 he sold his practice to a Dr. Rogers, and under an agreement undertook not to enter into partnership with or assist other persons in the practice or profession of a surgeon within a certain radius agreed upon between the parties, or keep or open a surgery or consulting room, or keep an assistant, or reside

within such radius, or directly or indirectly enter into competition with Mr. Rogers in the practice of a physician. He remained in Birmingham, however, having been appointed physician of the Children's Hospital in Broad Street, and had attended patients within the radius. Mr. Rogers asked for an injunction to prevent this practice. For the defendant it was argued that old patients had gone to the defendant, and had asked him to attend them. There was nothing like solicitation suggested, and that if the patients had not gone to the defendant they would not in any case have gone to the plaintiff. Mr. Justice Chitty, without calling for a reply, decided that there had been competition, and that plaintiff was entitled to the injunction for which he asked.

### BRISTOL.

BRISTOL NATURALISTS' SOCIETY.—A meeting of the Physical and Chemical Section of this Society was held on November 24, Mr. G. F. Schacht, the retiring president, in the chair. The hon. secretary (Dr. S. Young) read the report of the last session, from which it appeared that the number of members was 35, and there had been an average attendance of 11 at the meetings of the section. The financial condition was satisfactory. The report having been adopted, the election of officers was proceeded with, Mr. W. A. Shenstone being elected president and Dr. Young again undertaking the duties of secretary. Dr. A. Richardson then delivered an address on "The Increased Activity of Oxygen in Presence of Sunlight," followed by a paper by the newly-elected president on "A New Vacuum Tap."

### BURTON-ON-TRENT.

PROSECUTION UNDER THE PHARMACY ACT.—At the County Court on November 24, before Judge Woodforde, an action was brought by the Pharmaceutical Society of Great Britain against Mr. W. Denham, of Lichfield Street, Burton-on-Trent, for infringements of the Pharmacy Act. It appeared from the evidence that defendant carries on the business known as the Phoenix Patent Medicine and Drug Stores, Lichfield Street, and on October 15 he sold some laudanum to a woman. This came to the knowledge of the Society, and they now sued the defendant for 5*l*. as a penalty for selling the poison, he not being a registered chemist and druggist. A further penalty of 5*l*. was sued for in respect of titles, the plaintiffs alleging that defendant issued a circular with his name and address thereon, and the word "chemist" attached. The sale of poison was admitted, but it was denied that defendant had used the title "chemist," and it was explained by his solicitor, Mr. Smallwood, that copies of the circular referred to were wrapped round the goods which he received from a Leeds firm, who had his name and address, with the word "chemist" printed on them without his knowledge. Defendant, however, always tore off that part of the circular containing the word chemist before he sent it out. Mr. Flux (who represented the Society) produced a copy of the bill in its perfect state, and said it was obtained by a clerk in his office. He, however, was not present. His Honour said the production of the circular placed the onus of proof on the plaintiffs; and he, therefore, adjourned the case, reserving the question of costs.

### CAMBERLEY.

THE ALLEGED POISONING CASE.—Henry Bowles has this week been on his trial at Farnham Petty Sessions on the charge of poisoning his reputed wife, Hannah Bowles, and his son Edward, at Camberley, on September 22. The evidence was very similar to what was given at the inquest. The case was concluded on Tuesday, Bowles being committed for trial. He afterwards volunteered a statement to the effect that his wife was in a violent temper on the day she died and took pills, giving his son also some.

### DERBY.

AN ASSISTANT'S CHARACTERS.—We last week reported the conviction of a chemist's assistant named Walter Walters, *alias* W. O'Brien Walters, *alias* Walter Trafford, for using a false certificate of character in applying for a situation with



Mr. Henry Monkhouse of Derby. We now give the correspondence which Walters had with Mr. Monkhouse, and the certificate of character which he forged. It will be seen that Mr. Walters, according to his own account, has had quite a brilliant career.

"Care of Mr. R. Adams, Kirkby Bain, Lincs., July 23, 1887.

"Dear sir,—I write in answer to your advertisement of yesterday in the *Journal*. I have had eleven years' experience—three years apprentice with Mr. Griffin (Louth), whose son was in your employ; two years with Mr. Kerr, New Bond Street; three years J. Bell & Sons, Oxford Street, London; and three years in my present situation. Minor and Apothecaries' Hall qualifications. Salary required 45*l*. indoors. I only ask a small salary as I have a private income of my own. Age twenty-six, height 5 ft. 8 in. I should be pleased to send you a carte during the week, and I assure you if it should be my fortune to enter your service I shall use my best endeavours to promote your business welfare. Trusting to be favoured with a reply, I remain, yours faithfully,

W. WALTERS.

"Present employer—Mr. Walter Trafford, chemist, Kirkby Bain, Lincolnshire."

Walters, it will be seen, states that he has the Minor qualification, but his name is not on the register of chemists and druggists. After receiving this letter Mr. Monkhouse wrote to Mr. Walter Trafford (an entirely mythical "chemist") and in reply received the following letter:—

"Kirkby Bain, July 27, 1887.

"Mr. Monkhouse.

"Dear sir,—In reply to yours of this morning, I am glad to be able to recommend Mr. Walters to you as an assistant, as during the three years he has been in my employ I have always found him very *honest*, sober, and industrious, and a thorough master of his business. He came to me with an excellent character from Mr. Hills (Bell & Co.'s manager), and I truly can say this of him, he has always given me the greatest satisfaction. I suppose he has told you the reason we are parting is that I am retiring on account of the lamented death of my dear wife. I shall be happy to answer any further communication.—I am, yours truly,

"WALTER TRAFFORD."

Mr. Monkhouse then wrote to Walters, engaging him, and received the following letter:—

"Kirkby Bain, August 3, 1887.

"Mr. Monkhouse.

"Dear sir,—I shall come to Derby by the 4.25 train tomorrow. I thank you for your letter and engagement, and during my service to you I will endeavour to increase your business welfare, and to study your interest and pleasure to the best of my ability. The hours are very agreeable to me, and I hope that if I can take any arduous work off your shoulders you will allow me to do. Thanking you for the courtesy of your letters.—I remain, yours faithfully,

"W. WALTERS."

In the course of the proceedings Mr. Monkhouse said he had taken up the case as a public duty in the interests of his fellow-tradesmen, whom he wished to protect against similar practices. He asked the bench to deal as leniently as possible with Walters, and added that he found out in a fortnight that his qualifications were not what he had represented them to be, and gave him notice to leave, and he was under this notice when he went away.

#### DUBLIN.

DR. CROSS'S CASE.—The application to have the place of trial changed to some other town than Cork was disposed of in the Queen's Bench Division, Dublin, on Monday. The Court discharged the conditional order granted to the prisoner, holding that no proof had been produced that he would not be fairly and impartially tried in Cork at next assizes.

PROSECUTION UNDER THE PHARMACY ACT.—At the Southern Divisional Police Court on November 23, before Mr. Byrne, Frederick Sweeney, of Lincoln Place, Dublin, was summoned by Thomas Prescott, inspector for the Pharmaceutical Society of Ireland, for having inscribed over his

establishment, "Prescriptions carefully compounded," he, as alleged by the complainant, not being a qualified compounder. Mr. McNery prosecuted, and Mr. Sweeney was defended by Mr. Philip Keogh. The latter asked for an adjournment as he had only got his brief on the previous evening, and this was agreed to on the condition that witnesses were heard. Mr. McNery stated that he was proceeding against the defendant for unlawfully assuming the title "Dispensing Chemist" contrary to the provisions of the 38th and 39th Vic. chap. 57. Mr. Prescott deposed that he had visited the defendant's premises frequently, and saw the words "Prescriptions carefully compounded" over the door, also "Frederick Sweeney, Dispensing Chemist." Mr. Farrell, the registrar of the Society, produced the register of pharmaceutical chemists to show that defendant's name was not on it. The name "John Galloway" was. A copy of the *Dublin Gazette* containing the rules of the Society having been handed in, the case was adjourned until November 29. The case was accordingly resumed on Tuesday. The defence was that the defendant's mother paid the taxes of the house, her husband being dead since 1869. He was during his lifetime a dispensing chemist, and from the time of her husband's death her son, the defendant, managed the business, not as a pharmaceutical chemist, but as a druggist, and that he in no way offended against the Act of Parliament. Mr. Keogh contended that the prosecutor had not proved that his client was the owner of the business at Lincoln Place, or that the business there was that of a chemist.

Mr. Byrne said that he did not consider that the case had been established, and he accordingly dismissed it, refusing to state a case.

#### HANLEY.

A BAD HORSE.—Last week Messrs. Catton & Bladen, wholesale chemists, Hanley, sued Jabez Hargraves, a grocer, of Newcastle, for the sum of 9*l*. 6*s*. 6*d*., in respect of a horse which they had bought from him, and which they alleged was in an unsound condition, so that, according to warranty, they had the option of returning it and getting back their money. They had paid 15*l*. for the horse, and when they returned it the defendant would only allow them 10*l*.; the horse was, therefore, sold by auction at 6*l*. 13*s*. 6*d*. The claim was for the balance, and 1*l*. for the keep of the horse. After evidence the judge allowed the claim, less 1*l*., with costs.

#### LEEDS.

THE MYSTERIOUS DEATH.—The inquiry into the circumstances of the death of Albert Laister, reported in this journal of November 12, was resumed on November 24. The Coroner stated that he had received a letter from Mr. Bothamley, who said he had made every endeavour to complete the analysis for the adjourned inquest, but found from the state of decomposition of the body, and other reasons, the analysis was unusually difficult to make. The inquiry was again adjourned to allow Mr. Bothamley time to report.

#### LEICESTER.

SMALLPOX has broken out here, five persons belonging to one family being affected. Four of the patients have been vaccinated, and these are suffering from a mild form of the disease, but the fifth patient has never been vaccinated, and his case is the worst. It will be interesting to watch the course of this outbreak in the most notorious anti-vaccination town in the kingdom.

#### LIVERPOOL.

SUICIDE OF A CHEMIST.—An inquest was held on Friday, November 25, on the body of Benbow Backhouse Marsden, fifty-one, who carried on business as a chemist and druggist at 74 Park Road, Toxteth, and who died on the Wednesday previous. Mr. T. B. C. Marsden deposed that the deceased, his father, had lately been ailing, and was troubled about business matters. A domestic servant deposed to finding the deceased in a closet in a dying state. Further evidence was given to show that poison (self-administered) was the



immediate cause of death, and the jury returned a verdict accordingly.

**POISONING CASES.**—On Wednesday an inquest was held on the body of Clara Mary Smith, twenty-one, who died on November 12, under suspicious circumstances. She had an attack of colic, which sedatives failed to relieve. Dr. S. H. Shaw saw her, but she was insensible. A packet of sulphate of zinc was found in the room, and after the girl's death a post-mortem examination and an analysis of the contents of the stomach by Mr. E. Davies showed that death was due to irritant poisoning, viz. sulphate of zinc. Verdict accordingly. On the same day a plumber named Marrs, residing in Walton Road, committed suicide by swallowing a quantity of carbolic acid. On Tuesday evening Edwin Laslett, twenty-six, a chemist, committed suicide at his residence, University Road, Bootle, by taking arsenic. Laslett has been suffering from insanity for two years, and spent a portion of the time in a lunatic asylum.

**"CHEWING-GUM."**—At the last meeting of the Liverpool Chemists' Association, held November 24, Mr. A. C. Abraham, F.C.S., president, said he wished to call attention to a subject which he thought was worth a little notice—he referred to the prosecution in the police court of a confectioner for selling chewing-gum. He thought that they would be perfectly free from bias in the matter, as they did not deal in nor manufacture such articles; but they were particularly called upon to express an opinion upon such a prosecution, as it was a great injustice that a dealer in sweets should be prosecuted for selling an article the composition of which was entirely unknown in this country. The chewing-gum was manufactured in the United States, and was not made of gum at all, or else it could not have been chewed. It was called gum probably because there was a certain amount of gum-resin in it, and he could not but think that to prosecute a man for selling an article of such a kind, mixed with the perfectly harmless ingredient known as paraffin, was a great hardship and an entire perversion of the Food and Drugs Act. Whether the object was to prevent the children from chewing it—which certainly should not be encouraged—it was not for the authorities to prosecute tradesmen, whatever their views upon the subject might be. (Hear, hear.) Mr. Samuel said he thought the presiding magistrate was not aware of what chewing-gum really was composed. Mr. Welling said it was a strange thing to convict anyone for selling an article which was not correct, when there was no standard to show what the correct thing should be. Chewing-gum was certainly not a food. Mr. Conroy said it was a very absurd thing for tradesmen to be prosecuted and fined for selling an article not injurious to health. In his opinion the magistrate did wrong in refusing to grant a case. The matter then dropped. This discussion appears to have had effect, for since it took place another case has been heard, and, the solicitor for the defence having intimated that steps were being taken to appeal against the decision which we recorded last week, on the ground that the article is not food, the case was adjourned for a month, by which time it is expected the Recorder will have decided the point.

#### LYTHAM (LANCASHIRE).

**WEAK SPIRIT OF NITROUS ETHER.**—At the Kirkham Petty Sessions on Monday, Richard Ashworth Hoyle, pharmaceutical chemist, Lytham, was summoned for selling adulterated spirit of nitrous ether. On October 27 a constable went to the defendant's shop in Church Road, Lytham, and purchased two ounces of the spirit, for which he paid 8d. On being told that it was bought for the purpose of analysis, the assistant remarked that he thought they would find it all right. A third of the quantity bought was sent to Dr. J. Campbell Brown, of Liverpool, public analyst, who in his report stated:—"I am of opinion that the sample is less than three-sevenths, or not much more than one-third, of the strength when fresh, and is less than three-fifths of the minimum strength prescribed by the British Pharmacopoeia of 1885." Mr. Blackhurst, for the defence, stated that the defendant admitted the correctness of the analysis. When the spirit was purchased it was of the proper strength, but it was an article of such a description that, no matter how securely it was fastened up and corked, it evaporated very quickly. The defendant was a most respectable chemist,

and he thought the ends of justice would be met if he paid the costs, which he was willing to do. This course was adopted.

#### NEWPORT (MON.).

**ATTEMPTED SUICIDE WITH CORROSIVE SUBLIMATE.**—A domestic servant employed by Mrs. Rowlands, 11 Caerau Road, attempted to commit suicide on Thursday, November 24, by swallowing a teaspoonful of a solution of corrosive sublimate which she found on her mistress's dressing-table. She was taken to the infirmary, where the stomach-pump was successfully applied.

#### NORWICH.

**A CHEMIST IN A LIONS' DEN.**—Mr. Arthur Woodcock, chemist and druggist, of Norwich, provided his fellow-townsmen with a sensation last week. Wombwell's menagerie was then in the town, and one morning the citizens were startled by a printed announcement that Mr. Woodcock would in the course of the evening enter one of the lions' dens in the menagerie. This attracted a large number of people to the exhibition; indeed, at the hour appointed for the "intrepid" exhibition every foot of ground inside the menagerie was occupied by an eager and expectant audience. Shortly after half-past eight Mr. Woodcock made his appearance in evening dress, leading Madame Salva, "the lion tamer," and was received with cheers by the company. Upon arriving at a cage containing five Barbary lions, two wolves, and a dog-wolf, the small iron door was opened, and the lady stepped into the den, being closely followed by Mr. Woodcock. At the direction of the lady the beasts retired to a corner of the den, and then, to the accompaniments of red fire and stirring music from the band, the lady and gentleman waltzed round the stage. The audience complimented the executants with cheers, to which they both bowed; after which the "unaccustomed one" retired from the den. Mr. Woodcock repeated his marvellous experiment twice on the following day, which had the immediate effect of filling the exchequer of the menagerie.

#### OSWESTRY.

**EXTRAORDINARY CONFESSION.**—A young man, Henry Sides, son of a farmer at Glass Cut Farm, Oswestry, gave himself up on Monday as the murderer of his sweetheart at Llanfills, a Welsh village, on November 24 last year. He states that he met her on that night, and gave her port wine, with which he had mixed laudanum and other drugs, to drink. She became unconscious, and died in a few minutes. He buried her, using quicklime to hasten decomposition of the body. It has since transpired that the young man is insane.

#### PRESTON.

**LAUDANUM-POISONING.**—On November 24 an inquest was held at the infirmary on the body of James Lucas, forty-seven, who had died there from the effects of an overdose of laudanum. Deceased had gone to an inn, and pouring a small bottleful of the drug into a glass drank it off. He was taken to the infirmary, but the stomach-pump was not successful.

**THE SALE OF HOREHOUND BEER.**—At the local court on November 25, a confectioner named Duckworth was summoned, at the instance of the excise authorities, for selling horehound beer without a licence. The beer was purchased at Duckworth's shop, and on analysis at Somerset House it was found that it contained 3.7 per cent. of proof spirit. On behalf of the prosecution it was stated that there was a general impression throughout the country that this beer could be sold without a licence, and the revenue lost considerably in consequence. The case was a test one, and was regarded as of the greatest importance. The magistrates agreed in this, and fined the defendant 20s. and costs.

#### SALCOMBE.

**PRESCRIBING BY CHEMISTS.**—An inquest was held at Salcombe, on November 26, on the body of a child named



Rosaline Symons, who died on November 24, no medical attendant having been called. From the mother's evidence it appears that she thought the child had measles, and she procured a powder from Mr. Balkwill, chemist. After taking the powder the child seemed to get better, and the next day she asked Mr. Balkwill to see the child, which he did, and said it had a touch of bronchitis and a little inflammation. He gave her medicine, and ordered her to apply poultices. The child appeared very bright on Wednesday, but in the evening grew much worse, and Mr. Balkwill's assistant called to see her. He advised the mother to go for a doctor, and she procured Dr. Twining, who saw that the case was hopeless, and refused to give a certificate when the child died. The mother, in reply to a question, stated that it never entered her head to send for a medical man before, as she thought the child was all right under Mr. Balkwill's treatment. Other witnesses gave evidence, including Mr. A. Thomas, the assistant who visited and prescribed for the deceased, and Dr. Twining, who said that the cause of death was bronchial pneumonia. The Coroner, in summing up, dwelt upon the fact of the visiting by the chemist and his assistant, and their prescribing medicine for the deceased, as being contrary to law. He also commented upon the mother's conduct in the matter. The jury, without retiring, returned a verdict of "Death from natural causes," and, upon being asked if they had any rider to add, remarked that the publicity of the case would prove a sufficient warning. The Coroner hoped it would be a warning to others not to pursue a similar course.

#### SHEFFIELD.

DR. MARTIN has by a large majority been appointed surgeon to the Jessop Hospital, in place of Mr. Woolhouse, who has been appointed honorary consulting physician.

MR. IBBOTSON, chemist, Ecclesall Road, has sold his business to Mr. Percy Cave. The business hitherto carried on by Mr. Henry Gill, Meadow Street, has also changed hands.

"CUI BONO?"—The notice intimating a debate on the desirability of free trade in drugs, at the entrance to the local society's rooms, has been marked "Postponed." Are Sheffield pharmacists, then, all free traders, or are they all protectionists?

EXIT VACCINATION. — Local chemists have of late had quite a run on the following prescription:—

Cream of tartar .. .. .	1 oz.
Powdered rhubarb .. .. .	14 grains

The prescription is generally accompanied by the inquiry, "Is it a good thing?" It seems that a reverend gentleman had recommended it as an infallible remedy for and preventive of smallpox in a letter written to a Leeds newspaper. The Sheffield papers copied, and rhubarb and cream of tartar now hold the field.

THE APPLICATIONS for the appointment of medical officer of health were considered by the committee on November 24, and the following short list of six was agreed upon:—Dr. Willey, Medical Officer of the Borough Hospital; Dr. F. Arnold Lees, of Hirst House, Heckmondwike; Mr. A. C. A. Packman, of the Park, Sheffield; Mr. J. B. Siddall, of Bideford, Devon; Mr. Theodore Thomson, Medical Officer of Health for Aberdeen; and Mr. John J. Eyre, of Forest Hill, London.

TAPEWORMS.—In a Saturday evening lecture on parasites, given by Mr. Alfred Denny, at the Firth College, on Nov. 26, it was pointed out that the so-called "tapeworm" was in reality not a single individual, but a colony, each "joint" being a complete sexual individual, producing eggs in enormous numbers. These eggs are hatched in most cases in the stomach of a herbivorous animal; the young bore through the stomach, and migrate to some retired part, such as the muscles, the heart, or the brain, and on arriving there develop into a "cyst," which is incapable of further development until it is introduced into the body of a new host, when it passes into the intestine, and there develops into the tapeworm. The tapeworm of a carnivorous animal gets to the body of its host by first entering the body of some vegetable feeder which is the prey of the carnivore.

DISINFECTING BOOKS.—In these pestilential days a fruitful medium for the dissemination of smallpox is afforded by the books of the Free Library. The committee of the library have recognised this, and have ordered an apparatus for disinfecting the books, which is the invention of Mr. George Cooper, of the Electric Works, Wicker. The apparatus consists essentially of an oven heated by hot-water pipes communicating with a boiler at the base. At the bottom of the pipes is a copper tray for holding disinfecting fluid. The vapour thrown off by the heat is absorbed by the books, which by this means are purified. One hundred books can be disinfected at one time. Mr. E. R. Learoyd, chemist, has published a letter in the *Sheffield Daily Telegraph* in which he deplores the folly of taking such a step, when at the cost of a few pence a lamp might be obtained of equal value as a disinfectant. In the course of the same letter some strong comments are made on the lethargy displayed by the Health Committee in not erecting wooden sheds for the isolation of smallpox patients during the epidemic.

#### SKELMERSDALE.

A CHEMIST-DENTIST CHARGED WITH ARSON.—The magistrates of the Ormskirk Police Court were occupied with hearing evidence in a charge of arson against Walter Fletcher, a registered dentist, carrying on business at Skelmersdale. The prosecution alleged that Mr. Fletcher, on November 5, set fire to his house and shop with intent to defraud the Sun Fire Office. It appears that he became tenant of the premises in the spring of 1882, and that he carried on the business of a chemist and druggist in them. A little while after he took the premises the name of the tenant was changed to Greatrex, but two years ago it was again put in Fletcher's name. A year ago he left the house part of the premises in order to reside in Ormskirk, where he also has a shop. On November 5 Fletcher closed the premises at about half-past ten, and at about 10.56 he left the shop and made for the station to catch the 10.58 train to Ormskirk. Directly he had left, or within two or three minutes afterwards, the shop was discovered to be on fire. The accused was immediately followed to the station, and after some persuasion on the part of the messenger, he went back to his shop. When he arrived he stood in the road smoking a cigar and appeared to be perfectly unconcerned. It was also alleged that he had expressed a desire to sell his business. The fire was stated to have broken out in three if not four places, and it was stated that the tap of a canister of oil in the back shop was found after the fire to be turned on full, and that a bundle of tow, which had been afire, had been found in the shop after the fire. Witnesses were called, amongst them Mr. R. D. Sowray, chemist and druggist, who stated that his shop was next door but one to the shop occupied by Fletcher. He deposed to seeing smoke and flames issuing from Fletcher's shop three or four minutes after he left it. His own shop became full of smoke. He had refused to lend his key for the purpose of trying if it would open Fletcher's shop. Witnesses deposed to seeing a stream of burning oil on the floor. George Bowler, a fire-assessor, detailed the results of his inquiries regarding the fire. He had found that Fletcher's apprentice had been making furniture-polish on the day of the fire, and had thrown down a match on the stairs where the fire partly originated. The accused informed witness that he had traded as Greatrex & Co., because he himself was not a chemist and druggist. At that time he had an arrangement with Mr. Greatrex, but Mr. Greatrex was now dead. He made a private arrangement with his creditors in 1882, when he paid those who pressed him 2s. 6d. in the pound, and those who waited his time got 10s. in the pound. He had further stated that at the present time he was in a good position and could pay everybody. His business in Skelmersdale yielded him about 200*l.* a year, and he had another in Ormskirk. For the defence Mr. Shee called the superintendent of the Ormskirk fire-brigade, who was of the opinion that from what he saw the fire was accidental. The inspector of the Birkenhead fire-brigade gave similar testimony, and from this evidence Mr. Shee contended that the case was one which should not go to trial. The magistrates, however, considered there was a *prima facie* case, and committed Fletcher for trial at the Liverpool assizes, bail of 400*l.* being accepted for his appearance.



## SPILSBY.

WHAT IS BRANDY?—The magistrates of Spilsby have just been engaged in considering a knotty point, which was all the more difficult to decide because the best authorities differed. The question arose in a case in which Joseph Mears Blow, an innkeeper, was summoned for selling as brandy alcohol coloured with caramel. The case was adjourned for Dr. Graham, the county analyst, to more fully define what was brandy, as it was contended, and shown by Webster's Dictionary, that brandy was produced from other products than those of the grape, such as cider, &c., and that duty was paid to Government for spirit extracted from the latter and passed out of bond as brandy. Dr. Graham has now issued a report, in which he says:—"The compiler of the work entitled 'The Illustrated National Pronouncing Dictionary' defines brandy as a spirit distilled from wine, cider, or fruit. He is in error. In Ogilvie and in Webster we find the definition of brandy to be 'an ardent spirit distilled from wine.' Ordinary dictionaries are, however, no authority in matters of a technical nature; and, therefore, I beg to quote the following:—(1) 'The Encyclopædia Britannica,' which says of brandy that it is 'a spirituous liquor obtained by the distillation of wine.' (2) 'Watts's Dictionary of Chemistry,' the most complete and most valuable work on chemistry of modern times, written by men having special and well-recognised authority in different branches of chemistry, says, 'This well-known liquor is the spirit distilled from wine.' (3) In 'Blyth's Manual of Practical Chemistry: analysis of food and detection of poisons' we find, 'Brandy is a spirit from the distillation of wine.' (4) In 'Brande and Cox's Dictionary of Science, Literature, and Art' we find, 'Brandy is a spirit obtained by the distillation of wine,' and 'Artificial brandy is manufactured by flavouring grain spirit.' In Hassall's memorable work on 'Food: Its Adulteration,' we find his definition of adulteration of brandy to be 'any foreign spirit, sugar, any acid or carminative substance, or any substance employed to produce flavour and aroma not derived from the grape.' My definition of brandy is 'A spirituous liquor derived by the distillation from the fermented juice of the grape;' and, therefore, an alcoholic liquid derived from cereals, malted or unmalted, potato or beetroot, or cane or maple sugar, is not brandy. When alcohol is derived from these sources, and is carefully rectified and purified, it retains no flavour by which we can detect its origin. Therefore I certify S99 to be alcohol coloured with caramelised sugar; in other words, a spirituous liquid coloured by caramel." On this report being read, Mr. Walter, who appeared for the defence, submitted that it was impossible to draw a hard-and-fast line when authorities differed so much. He would say that there was not a single innkeeper in England who sold really pure brandy from the juice of the grape or wine. He had before him the Imperial Dictionary, which gave brandy as a spirit distilled from cider or peaches. The magistrates, after deliberating, agreed to the charge being withdrawn on payment of costs, 17s. 9d.

## WHITEHAVEN.

MR. FRED T. ALLATT, of Whitehaven, chemist and druggist, has left the town, and last week his household goods were disposed of by auction.

## WOODBIDGE.

A FIRE occurred on November 25 in the pharmacy of Mr. E. J. Eaton, pharmaceutical chemist, Church Street. It originated in the woodwork behind a stove, but the timely arrival of the fire-brigade prevented much damage. Mr. Eaton was away from home at the time.

## SCOTLAND

## EDINBURGH.

VETERINARY AMENITIES.—At a quarterly meeting of the Scottish Metropolitan Society held last week, Mr. Cunningham intimated that at the next meeting he would table a motion the object of which would be to wind up the society. Principal Walley (of Dick's College) protested against this,

and said that if the motion was passed he would not remain a member of the society. On a vote being taken, Mr. Cunningham's motion was adopted by seven to six. Mr. Walley then said there was no use for him to remain in the room any longer. He looked upon this as a deliberate insult. As for the arguments put forward they were not worth referring to. Mr. Cunningham said he had only done his duty, to which Principal Walley answered as he was retiring, that it was very questionable. Principal Williams (of the New Veterinary College) said this quarrel was not between the two Colleges. He regretted very much that the harmony they had endeavoured to maintain should be broken up. After this several papers were read, viz., one on "Rheumatism" by Mr. Burnet (Maybole); one on "Intestinal Calculus" by Mr. Cameron (Berwick), and another on "Vomition in the Horse," by Mr. Fairbairn (Cupar). Professor Lewis, of the New Veterinary College, was afterwards elected president of the society.

## ELGIN.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—A meeting was held on November 25, Mr. A. Smith, president, in the chair. After a good deal of discussion it was, on the motion of the secretary, agreed to have a course of public scientific lectures, and Messrs. Smith, McCulloch, and Thompson were appointed a committee to organise the same. Several local medical gentlemen are expected to be among the lecturers. Mr. Thompson was afterwards called upon to read an interesting paper on "Trees," which induced a free and lengthened discussion.

BUYING A BUSINESS.—Judgment was given in the Court of Session, Edinburgh, on Saturday, in the action brought by George Sutherland, aerated water manufacturer, Elgin, against John Ettles, chemist and druggist there, for reduction of a contract of sale of an aerated water business, and for 1,000*l.* damages. The facts in the case were fully reported in THE CHEMIST AND DRUGGIST of July 30 last. The defender had advertised the business for sale as "an extensive and lucrative business in a desirable town in the North of Scotland," with a turnover of about 2,000*l.* a year. The pursuer applied, and agreed to pay 2,500*l.* for the business, partly in cash and partly by bills. The last of the bills was due on January 27. Of this bill the pursuer requested a renewal, but the defender refused to renew the bill, and it was after this refusal that the present action of reduction, seeking to set aside the contract, was brought. He claimed on the drawings, which he alleged were much less than the defendant stated, and also that the machinery valued at 500*l.* was worth only 200*l.* Lord Fraser, in giving his decision, pointed out that the estimated turnover was perfectly true; that a statement of the confident expectation as to profits was not the same as an assertion as to profits actually made; and that it was no fraud for a vendor to ask the highest price he could get for the article he wished to sell, the vendee in this instance having an opportunity of seeing what was sold, and of objecting, if he thought fit, to the price which the defender was entitled to fix. His lordship said there was no allegation that the vendor put anything in the way to prevent the pursuer obtaining a proper valuation. The profits of the business seemed to be about 30 per cent. There was conjoined with this action of reduction a note of suspension of the charge of 500*l.* contained in the bill on the same grounds, which had not been proved. His lordship therefore assailed the defender from the conclusions for reduction, repelled the reasons for suspension, and in the conjoined actions found the defender entitled to expenses.

## GLASGOW.

LAUDANUM-POISONING is becoming exceedingly common in this district. On November 24 an old man of seventy was conveyed to the Paisley Infirmary from Renfrew suffering from the effects of the drug. A large bottle which had contained the poison was found in his pocket.

A FIRE occurred on the morning of November 25 in the bottling-store of the aerated-water works of William Cuthbertson, 13 and 14 Newton Street, Paisley, and before it was subdued damage estimated at about 500*l.* was incurred.

THE WESTERN INFIRMARY report for the past year shows that 1,466 outdoor patients and 3,928 indoor patients were treated during the year.



## TINCTURA CINCHONÆ.

(A paper communicated to the Liverpool Chemists' Association, November 24, 1887, by J. S. Ward, Ph. Ch.)

IT has often appeared to me to be highly desirable that we should possess a more extended knowledge of the various pharmaceutical preparations such as infusions, decoctions, extracts, tinctures, &c., that are still of a somewhat indefinite composition, and especially so in the case of such as are official. Much good work has already been done in this direction, and in the last edition of our Pharmacopœia several preparations were, for the first time, standardised or made of definite strength; there is, however, much room for more work upon this subject, and I have not the slightest doubt but that in the next edition of the British Pharmacopœia we shall find the list of standardised preparations very greatly extended; but there will still be many that cannot practically be made of standard strength. I think that the subject of my paper, "Tinctura Cinchonæ," will probably belong to this class; none the less I consider it desirable to know how far such an important preparation represents the drug from which it is prepared, and in order to discover this I have made certain experiments, the results of which I propose to bring under your notice this evening.

My object in working out these experiments has really been twofold; 1st, to ascertain how far the official process exhausts the bark, and 2nd, to discover if samples obtained from different sources are at all uniform in composition. In order to solve the first problem I carefully prepared a tincture from an estimated quill bark. I then took 1 fluid oz., distilled off the spirit, evaporated the residue to dryness in a tared dish and weighed it, by which I found the amount of matter extracted from the bark by the spirit. I next mixed this extract with a little lime and water, and estimated the amount of total alkaloids therein, and finally I estimated the amount of alkaloids left in the marc.

The process employed in these estimations is the official one, and in estimating the marc, I took as much as represented 400 grains of the original bark, so as to have a fair amount of alkaloids present, and thereby minimise any errors of manipulation. The results obtained are expressed in the following table:—

	Percentage of		
	Quinine and Cinchonidine	Cinchonine and Quinidine	Total Alkaloids
Original bark.. ..	3.7036	1.2422	4.9458
Exhausted bark .. ..	2.1635	.5941	2.7576
Tincture .. ..	(1.5401)	(.6481)	2.2043

NOTE.—The fluid oz. of tincture { 32.276 grains of extractive, and  
contained { 1.939 " alkaloids (*vide* next table)

It will be observed that the amount of total alkaloids in the exhausted bark, and the amount of total alkaloids in the tincture slightly exceed the quantity found in the original bark. This I can only account for by supposing that the exhausted bark, *i.e.* the bark minus resin and extractive matter, yielded its alkaloids somewhat more completely to the benzoated amylic alcohol than did the original bark. It will also be observed that in the case of the tincture I only estimated the amount of total alkaloids, the amount present from 1 fluid oz. of tincture being too small to conveniently separate into two portions. I have, however, in the above table shown approximately the proportions of the alkaloids by subtracting in each case the amount found in the exhausted bark from that found in the original—the results being placed in parentheses.

I may remark that the pint of spirit extracted 645½ grains of matter from the 4 oz. of bark taken, and therefore 252½ grains of the marc represented 400 grains of the original bark, and was the quantity estimated.

In order to ascertain whether tincture of cinchona obtained from different sources is fairly uniform in alkaloidal strength and composition generally, I procured six samples, some from wholesale houses and others from retail chemists who

prepare their own tinctures, and submitted them, with the one prepared by myself, to the following experiments:—

First the specific gravity was taken, then the spirit distilled off and the amount of alcohol they contained calculated therefrom; a measured volume was then evaporated to dryness in a tared dish, the amount of extractive ascertained, and, finally, the amount of alkaloids in each was estimated.

The following table shows the results which were obtained:—

## Tinctures.

No.	Specific Gravity	Extractive from 1 fluid oz.	Total Alkaloids from 1 fluid oz.	Percentage of Alcohol
1	0.9520	32.2763 grains	1.9398 grains	44
2	0.9426	29.0893 "	1.6975 "	46½
3	0.9423	24.2282 "	1.7129 "	45
4	0.9488	29.9380 "	1.8827 "	48
5	0.9411	20.3362 "	0.7716 "	45½
6	0.9557	31.6818 "	1.7129 "	41
7	0.9515	35.4936 "	0.9876 "	45½

NOTE.—No. 1 is the tincture specially prepared by myself for these experiments.

The inferences to be drawn from these results are:—

1st. When tinctura cinchonæ is prepared in exact accordance with the official process, the bark and the spirit being of standard strength, only 44.27 per cent. of the total alkaloids of the bark are extracted. Further, the different alkaloids are not equally dissolved, for only 41.49 per cent. of the quinine and cinchonidine are extracted, whilst 52.10 per cent. of the quinidine and cinchonine are.

2nd. There is no relation between the amount of extractive and the amount of alkaloids contained in the tincture.

In conclusion, I may remark that I consider the tinctures examined were fairly uniform in strength (excepting Nos. 5 and 7), and that I was somewhat surprised to find that the distillates in nearly every case showed a deficiency of 4 per cent. or 5 per cent. of alcohol below proof spirit. I was especially surprised at this in the case of No. 1, because I took the specific gravity of the spirit with which I made the tincture and found it correct. In making the tincture I took precautions to avoid as far as possible any evaporation during the process, and do not think that so much as 5 per cent. of alcohol had been lost in this way.

## EDINBURGH CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.

A MEETING was held in the Pharmaceutical Society's house, Edinburgh, on November 23, at 9.15 P.M., Mr. George Lunan, President, in the chair.

The principal business of the evening was a paper on

## PRACTICAL PHARMACY.

BY JAMES MACKENZIE.

After a few preliminary remarks the author spoke of the uniformity of the strength of preparations, which he considered of great importance. Such preparations as extract of aconite he strongly condemned. This is a powerful preparation given in minute doses, yet the Pharmacopœia directs it to be evaporated to a suitable consistence for forming pills. He thought this was wrong. First, because there is no necessity for it being a soft extract at all, for, unlike extractum gentiane, it is never prescribed as an excipient. Secondly, as, being seldom prescribed, a small quantity lasts for a considerable time, so that it gets hard and so concentrated on keeping that, if it is dispensed in this condition, it might lead to bad results. This could be obviated by exhibiting such preparations in the form of abstracts. The author also objected to the presence of chlorophyll in the extract, and stated what he thought the best means for making it (percolation and evaporation to dryness). Extract of opium and extract of cascara sagrada should also, in his opinion, be powder preparations. After some remarks on extract of nux vomica and the value of standardisation, the author proceeded to discuss the juices



of the Pharmacopœia. He complained that the B.P. does not give directions for ascertaining the amount of moisture in the plant, which, "being more or less succulent, would have an important bearing on the juice"—e.g. a plant grown in the shade would yield much juice; if the weather had been dry a plant would obviously yield little juice, and that necessarily of a high degree of potency. As an example of the uncertainty of this class of preparations, the author took succus belladonna, which is prepared from the fresh leaves and young branches of *Atropa belladonna*. The leaves are the part of the plant richest in alkaloid. Chalky soil has also been proved to favour the development of atropine. Wild plants are also richer in alkaloid than cultivated plants, therefore it follows that in making the juice the proportion of leaves to young branches used, the nature of the soil upon which the plant has been grown, and whether the plant has been wild or cultivated will all tend to influence the strength of the product. He had examined three samples of this juice, obtained from different sources, by Dunstan and Ransom's process, the results of the estimations being as follows:—

No. 1. 50 c.c. gave only a trace of atropine.	
No. 2. 50 c.c. gave 0.03 gramme, equal to 0.06 per cent. by volume	
No. 3. 50 c.c. gave 0.025 " " 0.05 " "	

The author then proceeded to speak of the tinctures of the B.P., and especially advocated more careful attention by the authorities to the alcoholic strength of menstrea. Tincture of opium, he thought, might be advantageously diminished in alcoholic strength, say, to equal parts of rectified spirit and water; this exhausts the opium, but the official menstreaum does not. Tincture of myrrh should not, in his opinion, be macerated, and seven days is too long a period of maceration for tr. opii ammon. After some remarks on the morphine strength and the price of opium, the author proceeded to the non-official part of his subject, first submitting the following formula for

#### Cod-liver Oil Emulsion.

Gum tragacanth	..	..	..	1 drachm
Gum acacia	..	..	..	1½ "
Bernuda arrowroot	..	..	..	1 "
Cod-liver oil	..	..	..	6 oz. "
Water	..	..	..	6 "
Spirit of chloroform	..	..	..	1 drachm
Saccharin	..	..	..	3 grains
Oil of cassia	..	..	..	9 minims

Put the powders in a dry mortar, add a little of the oil, and rub well together until it has a creamy appearance, then add the remainder of the oil and mix. When the powders are well diffused throughout the oil add the water all at once, and use the pestle diligently until the emulsion is formed. Dissolve the saccharin in the spirit of chloroform, and to the solution formed add the oil of cassia and incorporate this in the emulsion. The saccharin should be dissolved in 3j. S.V.R. by the aid of heat, and 3 drops of chloroform added to the solution.

This formula the author has had in use for some time, and it gives very satisfactory results. As will be seen, it resembles, but also differs in some important points from, Mr. Gerrard's formula. After some remarks on saccharin—the sweetening power of which, in relation to sugar, he estimated as 1 to 100—the author concluded by saying that "there is a wide gulf between the position of the legitimate pharmacist and the unqualified keeper of a drug store. The legitimate pharmacist has the interests of his profession at heart; but I sigh for the future of pharmacy if its interests are to be consigned to the tender mercy of the store-adventurer."

An interesting discussion followed, which was taken part in by Messrs. Coull, Duncan, Henry, Hill, Lunan, Donald MacEwan, Melvin, and Taylor. Mr. Mackenzie replied.

Some queries were then read and partially discussed.

EXAMINER: "What is the object of using benzoin in the official benzoated lard?" Candidate: "If you did not use the benzoin it would not be benzoated lard."

PHARMACEUTICAL ETYMOLOGY.—Ingenuous Pupil: "Why, sir, are these little cones called suppositories?" Jocular Master: "Their etymology is on the *lucus a nra lucendo* principle. You boys are not supposed to know what becomes of them when they leave the pharmacy." Ingenuous Boy: "Ah! I see."

#### MIDLAND COUNTIES' CHEMISTS' ASSOCIATION.

A MEETING of this association was held in the Grand Hotel, Birmingham, on the evening of November 24. There was a good attendance. Mr. G. E. Perry presided, and read the first paper, which was on

#### A NEW FORM OF PERCOLATOR.

He exhibited one of the percolators which are made by Mr. William Toogood, and remarked that it fulfilled a long-felt want. It was constructed on the lines given in the United States Pharmacopœia. It differed, however, in two particulars—the one, and the most important, consisted in its being longer in proportion to its diameter. The U. S. P. percolator is more conical than Mr. Toogood's, and has a depth three-and-a-half times the diameter at the top, while Mr. Toogood's has a depth five times its larger diameter. This is a decided advantage, inasmuch as the higher the column of material and menstreaum in proportion to their bulk, the more complete is the exhaustion with the same quantity of menstreaum. The other difference between the new percolator and the U. S. P. one is in the construction of the stem. In the U. S. P. percolator this is narrowest at its extremity, and the cork which is fitted in the neck has to be inserted from the inside; Mr. Toogood's percolator has a regular bottle neck, in which the cork can be inserted in the ordinary way. This, though apparently a small matter, is a source of much comfort practically. The percolator is made in the following sizes:—12 oz., 25 oz., 66 oz., 100 oz., and 160 oz.

A discussion followed, which was taken part in by Mr. Arblaster, whose experience of the conical form of percolator was that it allowed a large loss of spirit; Mr. Brewis objected to the rubber attachments as provided in the U. S. P. Mr. Barclay thought the paper a very useful one, and Mr. Alcock suggested that the objections to rubber could be got over by having a reversible glass stopper fitted in the contracted portion, as in the case of a glass separating-funnel.

The next paper read was entitled

#### REMARKS ON DENTIFRICES.

BY T. ELLIOTT.

In the absence of the author the paper was read by the secretary. After preliminary references to the necessity of keeping the teeth clean Mr. Elliott strongly condemned the use of soot and charcoal, and pointed out that this caused a kind of tattoo-mark beneath the surface of the gum. He spoke highly of the use of common salt as a dentifrice. The occasional use of pumice powder was not detrimental, but the persistent use of astringents was very unwise. In the case of liquids and pastes, an aromatic and antiseptic oil was a good addition when combined with a small quantity of an alkaline substance. He thought that care should be exercised in getting a tooth-brush the hardness of which was suitable to the person's mouth who was to use it.

Mr. Alcock followed with a

#### NOTE ON METHYLATED ETHER.

In this he remarked that he had examined a sample of the ether used in his own laboratory, and found that on adding to it an equal volume of pure sulphuric acid a deep red-brown colour was produced, which was not obtained when a sample of pure ether was similarly treated. He suggested that the reaction might possibly prove useful as a means of distinguishing the two varieties of ether as ordinarily sold under the names of "methylated" and "pure" in commerce.

In the discussion which followed Mr. Brewis thought the coloration would be due either to acetone or allyl compounds, and Mr. Barclay expressed the hope that the experiments would be continued, as it would be of the greatest import-





ance to have such a simple test for methylated and pure ether. Mr. Perry suggested that the presence of ethyl nitrite in the mixture might account for the coloration. Messrs. Lloyd and Prosser also joined in the discussion, and Mr. Alcock replied.

Mr. Perry then explained the action of Messrs. Rogers & Son's (Birmingham) new dispensing scales, which had been sent by that firm for the inspection of the members.

At the conclusion of the meeting Mr. Barclay, in a few happy and well-chosen words, proposed that the hearty congratulations of the members of the association be offered to the President on the occasion of his marriage. This was seconded by Mr. Prosser, and supported by Mr. Thompson. Mr. Perry suitably replied.

## Personalities.

THE branch establishment of Messrs. Dillon & Webb at 21 Commercial Street, Hereford, has been closed.

MR. G. GIBBONS, West Street, Weston-super-Mare, has disposed of his business to Mr. W. H. Webb, formerly a partner in the firm of Dillon & Webb, Hereford.

MR. H. S. PEARMUND has purchased the business lately carried on by Messrs. Dillon & Webb, at 7 Eign Street, Hereford.

MR. ARTHUR COLES has purchased the business lately carried on by Mr. Thomas Lunn, Foregate Street, Manchester.

MR. ARTHUR PEARSON LUFF, M.R.C.S., has passed the necessary examinations for graduation as a bachelor of medicine of the London University.

THE ROYAL HUMANE SOCIETY have awarded their silver medal to Mr. Hedley Hill, medical student, son of Mr. John Hill, pharmaceutical chemist, Neath. On October 17 last Mr. Hill saved a young lady from drowning, and restored her to consciousness after he brought her out of the water.

MR. T. HAMMETT has recently opened a chemist's business at 200 Higher Brinksway. The fixtures, fittings, &c., were supplied by Messrs. Evans, Sons & Co., of Liverpool.

## NEW COMPANIES.

**AUTOMATIC RECORDING-TILL COMPANY (LIMITED).**—Capital, 30,000*l.*, in 1*l.* shares. Object—to acquire the automatic recording till patented by Henry T. Davis.

**HENRY GADD & Co. (LIMITED)**, drysalts, &c. Capital, 1,000*l.*, in 1*l.* shares. Object—to acquire the business of Henry Gadd, of 31 New North Road, Hoxton, drysalter, general merchant, and packer, and to carry on the same at 4 Crondell Street, Islington. The said Henry Gadd takes 250 shares; a like number is subscribed for by J. Hülsman, 147 Gloucester Road, N.W.; and G. Rolfes, of 69 & 70 Mark Lane, takes 5 shares. These gentlemen will be the first directors.

**WELLS & RICHARDSON (LIMITED)**, manufacturers of dyes, &c. Capital, 20,000*l.*, in 100*l.* shares. Object—to acquire interests and rights in secret processes for the manufacture of diamond dyes, improved butter colour, kidney wort, lactated food, and golden extract of annatto. The first subscribers are E. Wells, A. E. Richardson, W. Wells, W. J. van Putten, H. Wells, F. H. Wells (all of 53 Shoe Lane), and H. Rankin, Clent Hill, Crouch End. Each with one share.

**ASSOCIATION OF MINERAL WATERS MANUFACTURERS (LIMITED).**—Capital, 1,000*l.*, in 10*l.* shares. Object—to acquire by lease, annual rental or otherwise, buildings for offices, to regulate, protect, and promote the interests of the trade in mineral waters and fermented botanic liquors, and to supply the public with good mineral waters and fermented botanic liquors.

## MARRIAGES.

**DOWNIE—HOLMES.**—On November 24, at 31 Oakshaw Street, Paisley, by the Rev. A. M. Lang, Robert Downie, dry-salter, to Mary, youngest daughter of the late James Holmes.

**LYON—CAMPBELL.**—On November 25, at Culcrae, Kirkcudbright, by the Rev. R. S. Wilson, M.A., U. P. Church, Castle-Douglas, William Malcolm Lyon, M.R.C.V.S., Wooler, to Ebenezer, sixth daughter of Mr. John Campbell, farmer, Culcrae.

**ROOKLEDGE—DALBY.**—On November 29, at the Wesleyan Chapel, Royal Leamington Spa, by the Rev. Edward Knibbs, Frederick Rookledge, chemist, Selby, to Ada Dalby, eldest daughter of David Dalby, Milverton, Warwick.

## DEATHS.

**BARNETT.**—On November 5, Mr. Thomas James Barnett, chemist and druggist, late of Tunbridge Wells. Aged 43.

**CASAMAJOR.**—News comes from New York of the death in that city, on November 13, of Mr. Paul Casamajor, a chemist of considerable repute. The deceased was born at Santiago, Cuba, in 1831. When quite young he came to New York, pursued his studies at Portsmouth, N.H., and afterwards went to Harvard and then to Paris, where he studied at the Ecole des Beaux Arts for four years, graduating with high honours as a civil engineer. Returning to the States, he became interested in the petroleum industry, in which he made a fortune owing to his inventive genius. He then took up a thorough course of studies in chemistry, and became one of the finest chemists in the country, his speciality being sugar. Mr. Casamajor introduced the oil of wintergreen as an effective salicylate with good results in rheumatic affections, and the discovery was made the subject of a long treatise by Dr. E. R. Squibb. The latest work of the deceased chemist related to quinine compounds, and although he secured patents to protect his interests, he was still engaged in experimenting in this line at the time of his death. Mr. Casamajor was corresponding secretary of the American Chemical Society.

**COOPER.**—On November 25, Mr. William H. Cooper, assistant with Mr. F. Dawson, chemist and druggist, Wigan. Aged 21. Mr. Cooper died rather suddenly from an attack of inflammation of the lungs. His funeral was attended by a number of his fellow-students from the School of Pharmacy, Liverpool, where he was much esteemed.

**DANCER.**—On November 24, at Greenhill Street, Greenhay, Manchester, John Benjamin Dancer. Aged 75. The deceased was a well-known optician and philosophical instrument maker, and in his day made some valuable contributions to science. In 1838 he suggested the introduction of earthenware porous jars to separate the two solutions in voltaic batteries, which before this time was done by means of bladder or other animal tissue. In the same year he invented the automatic contact breaker, and showed the practicability of the electro-deposition of copper, this observation being the beginning of electroplating. He afterwards turned his attention to photography, and suggested the application of that art to the magic lantern. The twin-lens stereoscopic camera was also his invention, and he devised many useful accessories to the microscope. Mr. Dancer was well known to men of science of the present and past generations. In his early days John Dalton befriended him; later, he was associated with Dr. Angus Smith in a microscopic examination of the dust of the Manchester streets. Sir David Brewster, Dr. Golding Bird, Professor W. C. Williamson, and others have spoken of Mr. Dancer's achievements in the highest terms. Mr. Dancer leaves a widow and six grown-up children.

**HOLT.**—On November 9, Mr. Thomas Holt, chemist and druggist, Ruddington, near Nottingham. Aged 70.

**MARSDEN.**—On November 23, at 74 Park Road, Toxteth, Liverpool, Benbow Backhouse Marsden. Aged 51.

**REYNOLDS.**—On November 10, Mr. Edwin Reynolds, chemist and druggist, Tuxford, Notts. Aged 52.

**TOWNSEND.**—On November 27, Mr. Robert Townsend, manufacturing chemist, at 6 Queen's Crescent, Glasgow. Aged 37.

**WHITE.**—On October 15, Mr. William White, chemist and druggist, High Street, Paisley. Aged 46.



## FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

**A NEW ACADEMICIAN.**—Dr. Péan was on November 22 elected a member of the Academy of Medicine, for the section of Surgical Pathology. Dr. Péan is noted for his skill in ovariectomy, and he is the author of several works on surgery.

**A COURAGEOUS CHEMIST.**—M. Charles Girard, the director of the municipal chemical laboratory, has been awarded a silver medal of the first class for several acts of courage, and notably for having, on October 18, under most perilous circumstances, rescued a woman from a burning building.

**A LATE RECOGNITION.**—The House committee have reported favourably the Bill providing for a life pension of 6,000f. to Dr. Maillot, who was the first to introduce the use of quinine for African fevers, especially those prevalent in the Mitidja plains. This was long ago, as now Dr. Maillot is eighty-seven years of age, and, it may be supposed, has come to need such assistance.

**THE FUTURE TUBERCULOSIS CONGRESS.**—The Board having effected a preliminary organisation, persons wishing to become members, or to obtain further information, are notified that membership dues may be forwarded to G. Masson, treasurer, 120 Boulevard St. Germain, and communications may be addressed to Dr. Petit, general secretary, 11 Rue Monge.

**DRY WHITE LEAD.**—The Council of Hygiene and Salubrity of the Seine department have, by a resolution passed on November 11, requested the Minister of Commerce to order that henceforth, "in the interest of white-lead workers, in all offers publicly solicited for the supply of State administrations and railway companies, none but white lead, ground in either oil or water, be allowed, to the exclusion of the dry powder."

**ECCENTRIC SELF-POISONING.**—A coal-dealer, of the Rue de Vaugirard, named Dubois, succeeded last Monday in killing himself with plaster-of-paris. After a quarrel of more than usual violence with his wife, he swallowed a semi-fluid mass of plaster and water, which, rapidly setting in his throat and stomach, soon choked him to death. Not very artistic, perhaps, as a mode of suicide, but less commonplace than rat-poison or carbolic acid.

**ACCIDENTAL CONIUM POISONING.**—A whole family at Versailles, consisting of the parents and two children, were last week poisoned with conium, which had been by mistake used instead of parsley in a dish of vegetables. The patients, being dangerously sick, were taken to the hospital for treatment. They are reported to have all recovered. It may be here remarked that a variety of conium, much resembling parsley, is the pest of all the back yards and gardens in Versailles. It is a wonder that accidents do not occur more frequently.

**NEW NAME PROPOSED FOR ANTIPYRINE.**—Considering that the compound is not an antipyretic but a pain reliever, and that its true chemical name, oxydimethylquinizine, is rather inconvenient, M. Nicot, a well-known Paris pharmacist, has proposed for it the appellation *parodyne*, from two Greek words (*para* and *odune*), meaning "against pain." Thus rechristened, antipyrine could be freely prescribed and dispensed without regard to trade-mark rights. French pharmacists feel sore about antipyrine, not so much, perhaps, because it is of German origin, as because a shrewd device has enabled its makers to evade the patent medicine law, and enjoy privileges denied to French pharmacists and chemists.

**GUM DROPS WITH GUM.**—In 1873 Souvignet, a Lyons confectioner, and evidently a genius, who had invented the name "Boules de gomme à la gomme," sold his retail business to one Magdinier, but reserved the wholesale manufacture of his gummy gum drops. In 1875 he sold out to one Faynel the right to manufacture the product. Magdinier for years kept buying his drops from the old place, but in 1884 concluded to sell some of his own make, and had new labels printed, by the same printer, exactly like the old ones, only substituting his own name for Faynel's. Hence a lawsuit just ended before the Lyons Court of Appeals,

which has held Faynel to be the lawful owner of the trade-mark, reversed the decision of the court below, and sentenced Magdinier to damages, besides ordering the forfeiture of the labels, boxes, &c.

**ARTIFICIAL SILK.**—M. de Chardonnet has communicated the following process to the Academy of Sciences. A solution of 3 grammes of gun cotton is effected in 100 or 150 grammes of a mixture of equal parts of alcohol and ether; next  $2\frac{1}{2}$  cubic centimetres are added of a 10 per cent. solution of dry ferrous chloride in alcohol, and finally  $1\frac{1}{2}$  c.c. of a like solution of tannin. The mixture being filtered is introduced in a vessel provided with a very fine glass or platinum point, which leads into a vase filled with water acidulated with 0.5 per cent. of nitric acid. On reaching the acidulated bath the solution immediately solidifies into a thread which may be spun by a uniform drawing motion. The thread, which is to be dried at once, is transparent, very pliable, and has all the appearance of silk. It is either grey or black, but may receive any colour provided it be added to the solution before spinning.

**CRYSTALLISED COLCHICIN.**—Not long since, in a case of suspected colchicin poisoning, chemists were obliged to confess their inability to prove or disprove the presence of the toxic principle. Such an opprobrium on chemical science no longer exists, as M. A. Houdé, a Paris pharmacist, has discovered processes for preparing true crystallised colchicin, and identifying as well as estimating it in combinations and mixtures. The active principle—it is not an alkaloid—is obtained as follows:—Powdered colchicum seeds are exhausted by percolation with about three times their weight of alcohol of 96 degrees. The percolate is evaporated in vacuo, at a low heat, until all traces of alcohol have been driven off. The residue, consisting of two layers, one watery and the other oily, is shaken in a separator with a 5 per cent. solution of tartaric acid. The operation is repeated several times to thoroughly exhaust the oily stratum, which is almost twenty times as bulky as the watery, and contains most of the colchicin. The acid liquor is now shaken first with ether, free from alcohol, to remove the last traces of fatty matters—colchicin being insoluble in ether—and then with chloroform, which takes up all the colchicin together with some impurities. To purify it the solution is concentrated by spontaneous evaporation, and petroleum ether of sp. gr. 0.620 cautiously added. The addition at first throws down colouring matters and impurities, but it must be stopped when the clear solution has turned from a dark brown to a very light straw-yellow, else the colchicin would also be precipitated. Finally the liquor, on being left to spontaneous evaporation, yields crystallised colchicin in the shape of long colourless needles. The proportion obtained from the seeds is 3 per 1,000. An important point of the process is that no alkali and no mineral acid is employed, M. Houdé having proved they have both the effect of transforming colchicin into colchicein. Colchicin splits so easily under the influence of acids that even acetic acid will decompose it and form colchicein, a crystalline substance hitherto mistaken for true colchicin. The chemical until now regarded as colchicin is a mixture of the two substances. Hence the chemical reactions of true colchicin are substantially those already described, with one notable exception, however—namely, that the intense apple-green colouration afforded with ferric chloride, and insisted upon by most investigators, is characteristic of colchicein, but totally absent with pure colchicin not contaminated with colchicein. In toxicological researches the poison is best extracted by macerating the organs, properly divided, in alcohol of 90 degrees acidulated with a little tartaric acid, distilling off the menstrum *in vacuo*, and shaking the watery residue with chloroform. By spontaneous evaporation of the solvent colchicin is obtained in the amorphous state, and may be readily identified. The stomach, bowels, and liver are the organs in which colchicin is chiefly localised. Scarcely any is to be found in the kidneys or the saliva, and none at all in the blood.

**ORIGIN OF A SPECIES.**—School-teacher to anxious parent: "Your son is bright, intelligent, and getting along well in everything but handwriting." Parent: "That is all right—his writing don't matter; I am going to make a doctor of him."



## Legal Reports.

### HOP BITTERS.

In the High Court of Justice, Chancery Division, on November 25, before Mr. Justice Stirling, the case of the Hop Bitters Company v. Hebden was mentioned. Mr. Swinfen Eady said the defendant in this action, which was for an injunction to restrain him from infringing the plaintiff company's marks and imitating the make-up of their bottles, &c., had consented to a perpetual injunction, and to pay the sum of 30% costs and damages. There would, therefore, be no inquiry as to damages. His lordship granted a perpetual injunction against the defendant on the terms arranged between the parties.

### ALLEGED TRADE LIBEL.

In the Queen's Bench Division of the High Court, on Thursday and Friday of last week, before Baron Huddleston and a special jury, Thomas Rowan, of Leamington, sued the Jeyes' Sanitary Compound Company and Mr. L. Hakeman, the secretary of the company, to recover damages for libel. For the defence, it was denied that the alleged libel was published in malice, and the defendants pleaded that it was on a privileged occasion. Mr. Jelf, Q.C., and Mr. Tatlock appeared for the plaintiff, and Mr. Willis, Q.C., and Mr. Wolff for the defendant company.

It appeared from the opening statement of Mr. Jelf that the plaintiff, Mr. Thomas Rowan, had formerly been a traveller on commission for the old firm of Jeyes' Sanitary Compounds Company, but ceased to represent them in November, 1885. He then commenced to manufacture disinfectants under his own name at Leamington. Subsequently the defendant company issued the following circular:—

"Dear Sir,—It has come to our knowledge that Mr Thomas Rowan, now of Leamington, one of the travellers in the employ of the old company, has been soliciting from their customers orders for a disinfectant fluid manufactured by himself, and represented by him to be a similar preparation to their patent 'Perfect Purifier'; and further, in order to inveigle purchasers into giving orders for his spurious and worthless preparation, he has made various slanderous and libellous assertions about us—amongst others, one to the effect that there is no longer any Jeyes' Company in existence. In view of such false reports, we think it right to inform you that the patents, goodwill, assets, and property of every description belonging to the late company were purchased by us last November, and that the various compounds manufactured by them are now, and will continue to be, manufactured by ourselves at our works at Plaistow. . . . We trust, therefore, that, should you at any time require any of our compounds, you will be good enough, in order to insure your obtaining genuine goods, to forward your orders direct to us, as above.—Jeyes' Sanitary Compounds Company (Limited)."

"L. HAKEMAN, Secretary."

This was a serious charge against the plaintiff, and as the defendants would not apologise he was bound to come to the Court. The learned counsel contended that plaintiff had suffered considerable damage by the action of the defendants, and he asked for a verdict with damages.

Mr. Thomas Rowan, having given evidence in support of his counsel's opening, admitted in cross-examination that he had no knowledge of the ingredients of the fluid before he entered the service of the old company. He manufactured from a recipe given him by Mr. John Jeyes in 1880. It differed from the defendants' recipe for the "Purifier." He obtained his knowledge of the process and materials while in the service of the old company. He had informed persons that he would make allowances for drums of the old company. He accepted such drums now, and made the allowance. On September 2 he received a letter from the defendants to the effect that they had heard he was making at Leamington a spurious imitation of their patent fluid. He did not deny the allegations contained in that letter, because he did not think it worth while. He had told Mr. Austin, who acted for the Leamington Corporation, that he was selling "similar," not "the same," material as was being sold

by the company. He never led people to believe that there was no company in existence selling "Jeyes' Compound." He did not tell people that he had been defrauded by the company, but he said he had been very badly treated. He never advised people not to deal with the company.

Re-examined by Mr. Jelf: With the exception of Mr. Spilsbury, I gave no labels to be put on the drums for the purpose of directions for use.

Mr. James Spilsbury, analytical chemist, of Leamington, said that on August 25 he purchased two one-gallon drums from plaintiff, which he delivered to the corporation. In the first instance the drums came without directions, and he sent for directions. Plaintiff called, and gave him the labels cut off. He had not analysed the fluid, but he knew the materials. It was, he thought, made from creosote oils. He thought it a valuable preparation.

Mr. Willis, for the defendants, then submitted that there was no case to go to the jury, and that the circular was sent out on a privileged occasion. He contended that neither as against the company or the secretary, Mr. Hakeman, was there any evidence to show that this letter was not written honestly, and for the purpose which the law allowed of protecting their interests. He submitted that there was no evidence of malice on the part of the directors of the company or the secretary.

Mr. Jelf maintained that the evidence that the board decided on two occasions to send the circular to Mr. Rowan's customers was evidence against the defendants.

Mr. Willis replied that the circular was not sent to any but to those who had been customers of the old company, whose connection the defendants had purchased. Unless there was something in the circular itself which his lordship held against defendants there was no case.

His lordship said he considered that this was a privileged communication, but he thought there was the question as to whether the directors of the company sent out the circular honestly.

For the defence Mr. W. Lascelles Scott and Mr. H. R. Gregory gave scientific evidence agreeing that "Rowan's Fluid" was much inferior to Jeyes'.

Mr. Arthur Albert Bryon, coffee-house proprietor, of Cardiff, said that prior to 1886 he had used "Jeyes' Purifier" as a disinfectant for drains. About August, 1886, the plaintiff called on him, and told him that Jeyes' Company had gone into liquidation, and were no longer manufacturing, and that he was manufacturing the same fluid at Leamington. Witness believed that statement, and in consequence gave plaintiff an order. Mr. Rowan asked him to send any empty drums of Jeyes' to him, and he would allow for them. Since that time he had not dealt with Rowan, but with Jeyes' Company.

Other evidence to the same effect was given, and Mr. Brown, a director of the company, gave evidence of the purchase of the goodwill, &c., of the old company by the new company. So far as he knew none of the directors of the company in sending out the circular had any ill-feeling against the plaintiff. They thought the circular was absolutely necessary to protect themselves, and they believed the statements contained in the circular to be absolutely correct. The sending out of the circular was the action of the directors, and not one circular was sent to any person not a customer of the new or old companies.

Cross-examined: He could not tell from what patent the company manufactured their "purifier." They had three patents.

Mr. Tatlock: What are the ingredients?

Mr. Willis objected to the question.

His lordship allowed the question.

Witness consequently said the ingredients used were creosote oil, caustic soda, and resin.

Other directors and the secretary having given evidence, his lordship directed the jury that the sending by the defendants of the circular to the customers of the old or new company was privileged, but it was for the jury to find whether the defendants went beyond the privilege by acting from malice or an indirect motive.

Without hearing the speeches of counsel the jury gave a verdict for defendants.

Judgment accordingly, and injunction granted restraining the plaintiff from representing that he was selling "Jeyes' Fluid."



## A QUESTION FOR A CHEMIST.

**DOWNES v. FALLOWFIELD.**—This case came on for trial in the Queen's Bench Division, before Justice Manisty and a special jury, on November 26. The plaintiff, a photographer, carrying on business at Sleaford, sued the defendants, a London firm of photographic dealers, under the following circumstances. At the beginning of 1886 he obtained a large supply of cards or mounts from the defendants. After he had used them extensively he began to receive complaints from his customers that the photographs he had supplied them with had become spotted, so as to give the persons whose likenesses they were the appearance of having the small-pox or leprosy. Thereupon Mr. Downes was obliged for the sake of his reputation to supply other photographs in a great number of cases in the place of the defective ones. When Messrs. Fallowfield first received the letter from plaintiff complaining of the cards they communicated with the firm in Germany who had supplied them with the cards, and got a reply to the effect that the spots might have been caused by some bronze on the cards, they having been prepared in a press which had been previously used for bronze work. The defendants, however, consulted a number of chemists, who thought the defects complained of were due to starch having been contained in the preparation used for mounting the photographs. After a good deal of evidence had been heard in support of the plaintiff's case, Mr. Justice Manisty expressed the opinion that it was a matter that a chemist should decide. Counsel having conferred, it was arranged that the question at issue should be left to Dr. Hugo Muller, the ex-president of the Chemical Society, to report upon to his lordship, who would then dispose of the case without the assistance of a jury.

## BANKRUPTCY REPORTS.

## THE BANKRUPTCY DISCHARGE AND CLOSURE ACT, 1887

At the Birkenhead County Court on November 25, John Carrington Sellars, 52 Bridge Street, Birkenhead, manufacturing chemist, whose affairs were liquidated in bankruptcy under the Debtors Act of 1869, applied for his discharge, pursuant to the Bankruptcy Discharge and Closure Act, 1887, which came into force recently. This being the first case of the kind that has come before any court since the passing of the new Act, considerable interest was taken in the proceedings. The applicant stated that in 1883 he was carrying on business in Birkenhead as a manufacturing chemist. At this time the Cheshire Concrete Company (Limited), which he had been instrumental in forming, was wound up, and his interest in that company he assigned to a Mr. King. His sister started as a cement manufacturer, and she employed him as manager, at a salary of 2*l.* per week. His sister traded under the style of "Sellars & Co.," but she had no partners. The applicant then detailed, in reply to Mr. Thompson, the sums he had received from various firms for his inventions; also that when he filed his petition he valued his patents at 5,000*l.* Mr. Moore urged that if the debtor got his discharge there should be some onerous conditions attached to it. There was only about 25*l.* available for dividend amongst nearly 3,000*l.* worth of creditors. Mr. Thompson maintained that none of the provisions of the new Act were intended to have the effect of sweeping away old liquidations, but the intention was to take from the creditors and put into the court the power either to withhold or grant a debtor's discharge. Mr. Horridge said the intention of the new Act was to take the power out of the hands of vindictive creditors of preventing an honest and straightforward debtor from getting his discharge. It was impossible that Mr. Sellars could pay anything out of his 2*l.* per week. Judge Wynn Foulkes, in giving his decision, said that it seemed to be the intention of the legislature to see that liquidating debtors applied for their discharge. As creditors did not meet to grant discharge, that function had been delegated to the court. The Act did not give any ground upon which to grant these applications, but it gave power to grant, subject to certain conditions. The only thing which prohibited the court from granting a discharge was where the court was satisfied the debtor had committed an offence under the

Debtors Act of 1869. His Honour then referred to the evidence, and considered that the debtor's sister had not acted wisely, nor had the debtor been prudent. For these and other reasons the order of discharge would be suspended for seven years, with liberty to apply, if the debtor paid 6*s.* in the pound to his creditors.

*Re* ROBERT PARK, 2 Nithsdale Terrace, St. Enoch Square, Glasgow, Doctor of Medicine.

This debtor was examined in bankruptcy before Sheriff Balfour, in the County Buildings, Glasgow, on November 25. The statement of affairs produced showed the liabilities to be 1,147*l.*, and the assets 136*l.* 4*s.* The trustee (Mr. James Martin, accountant, West George Street, Glasgow), having expressed himself satisfied with the explanations given, there were no questions put.

## Gazette.

## PARTNERSHIPS DISSOLVED.

BERTOLACCI, J. H., and BOWN, J. Q., St. John's Hill, New Wandsworth, medical practitioners.

PEAT, J., & Co., Church, chemists and druggists.

WESTLAKE, BETTELEY & Co., Calstock, Cornwall, and Rumleigh Beerferris, Devon, arsenic manufacturers; as far as regards E. B. Betteley.

## THE BANKRUPTCY ACT, 1883.

## [RECEIVING ORDER.

ABBOTT, WILLIAM HODSON, Annesley Woodhouse, Newstead Kikby, and Kikby Folly, Nottinghamshire, surgeon.

## ADJUDICATION.

CURTIS, ALBERT AUGUSTUS, Gloucester and Sharpness, chemist, druggist, and sauce manufacturer.

## FIRST MEETINGS AND PUBLIC EXAMINATIONS.

BADGER, WILLIAM JAMES, Allcroft Road, Haverstock Hill, and Drury Lane, mineral-water manufacturer. First meeting, December 2, 33 Carey Street, Lincoln's Inn; public examination, December 14, 34 Lincoln's Inn Fields.

BOWACK, GEORGE, Mocrgate Street, late of Lombard Street, East India merchant. December 2, 33 Carey Street, Lincoln's Inn; December 14, 34 Lincoln's Inn Fields.

GOODMAN, ZACHARIAH WALTER, Barking, soap maker. December 8, 33 Carey Street; December 7, Shire Hall, Chelmsford.

JAY, ALFRED (trading as Jay Père et Fils), late of Fitzroy Street, Euston Road, present address unknown, wholesale perfumer. December 2, Bankruptcy Buildings, Portugal Street, Lincoln's Inn Fields; December 16, 34 Lincoln's Inn Fields.

## ORDER MADE ON APPLICATION FOR DISCHARGE.

WILLIAMS, CECIL HENRY JOHN, National Dental Hospital, Great Portland Street, and Fitzroy Street, Fitzroy Square, late of Croydon. Discharge suspended for three months.

## NOTICE OF DIVIDEND.

LOWTHER, HORACE, Ventnor, Isle of Wight, doctor of medicine. Fourth div. of 1*s.* 3*d.*, December 1, Official Receiver's office, Newport, Isle of Wight.

MR. MASON, F.C.S., of Evans, Sons, & Mason (Limited), Montreal, arrived at Liverpool on Sunday on a brief visit to the old country, and expects to return in the course of a few days. Mr. Seabury, of Seabury and Johnson, New York, also came by the same vessel, the *Aurania*, and returns to-day.





*The following applications for Patents have been registered at the Patent Office.*

- Alkali.**—14,127.—October 18, 1887.—L. Mond and G. Eschellmann. Manufacture of chlorine.
- Alkaloids.**—15,587.—November 14, 1887.—C. D. Abel. Production of alkaloids.
- Antiseptic Garments.**—15,428.—November 11, 1887.—Count S. J. Ostrorog. Manufacture of antiseptic garments, coverings, &c.
- Antiseptics.**—15,564.—November 14, 1887.—A. Boake, F. G. A. Roberts, A. Shearer, and W. B. Giles. Preparation of antiseptics.—15,668.—November 15, 1887.—W. J. Cooper. Antiseptic or disinfectant.
- Bath Brushes.**—14,620.—October 27, 1887.—C. J. Bailey. Brushes for bath or other use.
- Beverages.**—14,491.—October 25, 1887.—W. A. Ross. Manufacture of sweetened beverages.—14,689.—October 28, 1887. W. Stevenson and R. Howell, trading as Stevenson & Howell. Manufacture of aerated beverages, and syrups and essences for carbonating or flavouring purposes.—15,530.—November 14, 1887.—T. Child. Manufacture of aerated beverages.—15,995.—November 21, 1887.—Charles Billing. Wines or beverages.
- Bronchitis Kettles.**—14,833.—November 1, 1887.—H. H. Mason. Bronchial kettles or inhalers.
- Capsules.**—16,103.—November 23, 1887.—G. Summers. Bottle-capsuling instruments.
- Chemical.**—14,494.—October 25, 1887.—W. Spilker. Improvements in chemical combinations.
- Compressed Tablets.**—14,280.—October 20, 1887.—S. M. Burroughs and Messrs. Burroughs, Wellcome & Co. Apparatus for compressing drugs and other substances.
- Confections.**—15,248.—November 8, 1887.—H. Jeffries. Composition for use with confections.
- Corn Erasers.**—14,175.—October 19, 1887.—J. Morgan. Corn erasers.
- Decolourising.**—14,883 and 14,884.—November 1, 1887.—A. Brin and L. Q. Brin. The treatment of saccharine and sacchariferous matters for the purpose of decolouring, purifying, or refining them.
- Disinfectants.**—14,864.—November 1, 1887.—W. B. Giles and A. Shearer. New antiseptic and disinfectant substances.
- Disinfection.**—15,384 and 15,385.—November 10, 1887.—E. Hermite, E. J. Paterson, and C. F. Cooper. Process and apparatus for disinfecting impure liquids by electrolytic action.
- Enamel.**—15,835.—November 18, 1887.—T. D. Harries. Enamelled composition.
- Feeding Bottles.**—15,031.—November 4, 1887.—F. Hall and J. Titley. Infants' feeding bottles.
- Flesh Brush.**—15,585.—November 14, 1887.—H. Neumann. Bath brush, flesh brush, or skin rubber.
- Fluid Separator.**—14,120.—October 18, 1887.—W. Bergh. Centrifugal apparatus for separating fluids of different specific gravities.
- Furniture Polish.**—14,245.—October 20, 1887.—F. Thake and J. Forrest. Furniture polish.
- Glass.**—16,142.—November 24, 1887.—G. J. Atkins. Process of producing a crystalline effect on the surface of glass.
- Infuser.**—15,927.—November 19, 1887.—W. S. Simpson. An improvement connected with saucepans to prevent overflow, also for producing decoctions from drugs, &c.
- Ink.**—15,079.—November 5, 1887.—W. Hackney. Inks, &c.
- Labels.**—14,888.—November 1, 1887.—A. Grisi. A bottle and label protector.
- Liniment.**—15,791.—November 17, 1887.—W. C. Davis. Composition for external use for the alleviation of pain.
- Magnesium Chloride.**—14,653.—October 27, 1887.—W. F. R. Weldon. Apparatus for preparing oxychloride of magnesium.—14,654.—October 27, 1887.—W. F. R. Weldon. Apparatus for desiccating oxychloride of magnesium.
- Maltose.**—14,459.—October 24, 1887.—A. Brunn. Production of peptone and maltose or maltose substances.
- Marble Cleaner.**—14,636.—October 27, 1887.—J. R. Westbrook. Cleansing and restoring white marble.
- Marking Ink.**—15,320.—November 9, 1887.—J. Hickisson. Manufacture of coloured marking-ink pencils, and in mordants for the same.
- Medicated Biscuits, &c.**—16,187 and 16,188.—November 24, 1887.—H. Woern. Manufacture of medicated biscuits and sweetmeats.
- Milk (Preservation of).**—14,744.—October 29, 1887.—E. Scherff and C. Drenckham. Process for condensing milk and other fluids containing proteine and preserving the same.
- Oils.**—15,490.—November 12, 1887.—J. W. Lord.—Apparatus for expressing oil from substances.—15,491.—November 12, 1887.—J. W. Lord. Treatment of oils for their purification.
- Painting.**—14,264.—October 20, 1887.—J. Elliott. An invention for painting, entitled "Harze or resin spirit painting."
- Paste.**—15,814.—November 13, 1887.—J. J. Carr. Paper-hangers' combined paste and size.
- Phenol, &c.**—14,820.—October 31, 1887.—E. Ostermayer. Production of iodised sulpho acids of phenol, cresol, and thymol.
- Phosphates.**—15,237.—November 8, 1887.—L. R. Bazin. Process and apparatus for conversion of phosphates into thermophosphates.
- Phosphorus Trichloride.**—14,906.—November 2, 1887.—C. Fahlberg, of the firm of Fahlberg, List & Co. Apparatus for the production of phosphorus trichloride.
- Saccharin.**—15,502.—November 12, 1887.—A. Horn. Means of applying saccharin as a preserving and sweetening agent.
- Sinapism.**—15,013.—November 3, 1887.—J. J. Colman, F. E. Colman, J. Colman, and R. J. Colman. An improved sinapism.
- Soap (Antiseptic).**—14,285.—October 20, 1887.—J. Thomson. Mercurial antiseptic soap.
- Soap.**—15,314.—November 9, 1887.—H. Wiesinger and L. Rissmüller. Method of manufacturing 100 per cent. soap free of water.
- Surgical.**—15,014.—November 4, 1887.—J. Mayer. Surgical splints.—15,139.—November 7, 1887.—C. A. Frees. Artificial legs.—14,506.—October 25, 1887.—W. W. Matthews. Trusses.—14,786.—October 31, 1887.—H. Barrow. Trusses and other abdominal belts.—14,525.—October 25, 1887.—E. Huxley. Uterine support for riding and general use.—13,235.—November 8, 1887.—R. Mathieu. Lancets and similar surgical instruments.—15,576.—November 14, 1887.—B. Smith. Artificial limbs.—15,862.—November 18, 1887.—L. Haslam. Manufacture of horse-clothing, surgical and other bandages, chest protectors, &c.—15,979.—November 21, 1887.—C. F. Forshaw. Dental forceps.—16,139.—November 24, 1887.—C. W. Weisbarth. Fastening truss spring belt.
- Tannin Estimation.**—15,667.—November 15, 1887.—B. Nicholson and T. Palmer. A process for testing or estimating the strength of solutions of tannin.
- Tooth Brushes.**—15,802.—November 17, 1887.—J. Evans and J. F. Golding. Tooth brushes.



## Abstracts of Patents.

The following are abstracts of specifications recently published:—

**WASHING POWDER.** (*J. E. Quayle, 15 Waverley Road Liverpool. No. 11,560. September 11, 1886. 4d.*) Equal parts of powdered carbolic acid soap and commercial dry soap mixed forms "One of the finest Disinfectant Washing Powders in the world," and the patentee claims on the use of carbolic soap for this purpose.

**OZONE.** (*A. and L. Brin. No. 11,846. September 17, 1886. 8d.*) An illustrated specification showing how ozone may be produced on a commercial scale by passing a great number of electric sparks through oxygen. The oxygen (or atmospheric air) passes between layers or masses of divided or granular many-pointed conducting materials connected with an electric generator.

**PARASITIC LOTION.** (*A. Blackie, Tidebrook Manor, Wadhurst. No. 11,841. September 17, 1886. 6d.*) A substance for destroying animal and vegetable parasites and preventing their attacks. It is a combination of arsenic and sulphur. Arsenic is dissolved in glycerine by the aid of heat. Sulphur is dissolved in a watery solution of sodium or potassium sulphide so as to form a polysulphide of the base. These solutions may be used alone, or mixed, and to these such antiseptics as carbolic acid, tar oils, resin oils, &c. may be added; but the claim is for the arsenical and sulphur solutions made as described.

**BAKING POWDER.** (*W. G. Dunn, Hamilton, Ontario No. 11,995. September 21, 1886. 4d.*) A baking powder consisting of the ordinary materials (tartaric acid, cream of tartar, soda, and flour) to which 2 per cent. of potassium chlorate is added. The claim is for the use of the chlorate and it is stated to correct acidity and assist digestion.

**BEVERAGE (NON-ALCOHOLIC CIDER).** (*F. Woolway, Watsley House, Raglan Road, Bishopston, Bristol. No. 12,064. September 22, 1886. 4d.*) Apple juice is filtered by means of a Maignen's filter, and to every 100 gals. 6 to 8 oz. of salicylic acid are added. This is afterwards aerated, and the operations throughout conducted at a low temperature—say 50° F.

**WATER-SOFTENER.** (*H. R. Lipscombe, 144 Oxford Street, W.C. No. 12,061. September 22, 1886. 4d.*) A compound of 40 parts dry slaked lime, 50 to 60 parts of carbonate of soda (or an equivalent of carbonate of potash), 2 parts of phosphate of soda, and 1 part each of permanganate of potash, oxide of manganese, and carbonate of ammonia. Of this mixture 1 lb. is used for every 100 gals. of water.

**MEDICINAL TEA.** (*P. Homero, Trieste. No. 12,408. September 30, 1886. 4d.*) A mixture of *Polygonum aviculare*, 57 grammes, and *Lepidium rudemale*, 3 grammes. In the case of the former the roots are to be used as well, and both plants should be cut fine. Of the mixture 30 grammes are boiled in a litre of water until the mixture assumes a dark yellow colour. This forms the preparation for administration, which is said to be diuretic, but no particulars for its administration are given.

**IMPROVEMENTS IN FILTERS.** (*G. F. Marshall, Battersea. No. 7,088. May 26, 1886. 8d.*) The filters to which the improvements are applicable are the domestic water filters of the carbon block type, and the novelty consists in enclosing the carbon filtering block in a case or cover so as to contain air. Each time the water is renewed in the filter, this space is refilled with air, and it is forced through the block along with the filtered water, which is thus thoroughly aerated. The invention will be understood from the illustrated description which we have given of it on a former occasion.

**AUTOMATIC LIQUID-DELIVERING MACHINE.** (*P. Everett, Engineer, 47 Cannon Street, E.C. No. 8,403. June 25, 1886. 6d.*) This machine consists of a reservoir for the liquid, and tap which in the normal condition is locked, but on the insertion of a coin the tap is relieved and may be moved to allow a portion of the liquid to flow out. The specification is illustrated, the illustrations explaining fully the mechanical arrangements.

**IMPERMEABLE AND TRANSPARENT PAPER.** (*E. de Pass, London. From La Société de Lafarge Libre et Compagnie, Paris, France. 7,530. June 4, 1886. 8d.*) This should be taken with the previous patents, No. 5,242 of 1883 and No. 15,075 of 1884. The applicant there gives the composition of a preparation for waterproofing fabrics, leather, &c. of which the formula is as follows:—

Turpentine paste .. .. .	6 kilcs.
Tallow .. .. .	1.5 "
Wax .. .. .	0.5 "
Styrax (necessary and not optional) ..	0.2 "

The inventor has since found that a homogeneous substance is obtained. He now proposes to apply this mixture to all kinds of paper in order to make them transparent and impermeable to air or moisture. This transparent material is called styroleum and hydrofage cotton. The apparatus for using it is also described.

**INDIARUBBER SUBSTITUTE.** (*F. Greening, The Larn Wharf, Waterloo Road, Uxbridge. No. 8,442. June 26, 1886. 6d.*) Old paper or other fibrous material is digested in a mixture of sulphuric acid and nitrate of potash, previously heated to 75–90° F. The pulp is next washed and dried. The dried material is then mixed with a solvent consisting of 100 gals. of methylated spirit, 25 to 50 lbs. colophony, 10 to 12 lbs. of benzoin, and 80 to 100 lbs. of castor oil. The mixture is distilled at from 300 to 320° F., and the distillate dried [so the specification states]. The base thus formed may be treated in various ways, so as to form plastic material like whalebone, and it may be coloured with aniline dyes. For varnishes a larger amount of the solvent material is used than in the case of the solid articles, and in this condition it has special applications for coating eggs, capsuling bottles, and the like, or it may be used for a waterproofing.

**SACCHARIN-COATED PILLS.**—(*W. L. Howie, Cornbrook House, Eccles. No. 362. January 10, 1887. 6d.*) The object of this invention is to impart a sweet taste to various coatings for pills, such as a silicate of magnesia (pearl) or resinous coating, and also to the substances of which capsules are made. To make a sweet pearl coating, 1 part of saccharin dissolved in a suitable solvent is mixed with 200 parts of "lengated" [levigated?] talc, and the mixture dried; or 1 part of saccharin may be added to 500 parts of the mucilage, or other adhesive solution, which is used in coating the pills; or it may be mixed with 200 parts of the gelatine or its solvent used in coating pills with gelatine; or with the resinous varnish or other substances employed in pharmacy for coating pills, and which are mentioned in the specification. As to the application of saccharin to capsule-making, 1 part of it is added to each 140 parts of gelatine (70 parts of gelatine and 600 parts of water being given as suitable proportions for a mass). The claim is for the sweetening of pill-coatings and capsules, as described, by means of saccharin.

**CEMENT.** (*J. Thorrand, V. Nicolet, and A. Bonnet, Grenoble, France. 979. January 21, 1887. 4d.*) An intimate mixture, in contact with water, of dried and pulverised chloride of magnesium, with or without the addition of inert matters or calcareous powder, with magnesia also pulverised and mixed with calcareous powder or inert matters. The cement is white like plaster, and may be coloured with earthy pigments.

**PROTECTIVE VARNISH.** (*F. Garton, London. 3,794. March 12, 1887. 4d.*) This varnish is made by mixing together 10 parts of transparent "grains" of mastic, 7 parts of camphor, 16 parts of sandarach, 5 parts of genuine elemi, with Canada balsam and spirits of turpentine in equal parts. The whole is dissolved in alcohol, filtered and kept in a closed vessel until required for use.

**CURATIVE OILS.** (*B. W. and J. Weale, Sandpits, Ludlow. No. 6,518. May 4, 1887. 4d.*) For curing rheumatism, lumbago, sciatica, sprains, bruises, &c. The mixture consists of oil of spike, oil of swallow (prepared by digesting green elder leaves in sweet oil), and spirit of turpentine, of each 1 part, and 2 parts of oil of thyme.

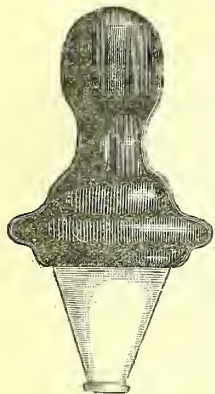
**CURING DISEASES.** (*J. Shaw, 14 Winnick Road, Warrington. No. 12,033. September 22, 1887. 8d.*) An improved method of cupping, the instrument being shown in diagram.



## Notes of Nobilities.

### NEW TEAT AND UNION.

MESSRS. BOURNE, JOHNSON & LATIMER are introducing what they happily call the "mother" teat and union, the



form of [which, as given in the figure, sufficiently shows the value of the invention. The union exactly resembles a stemless funnel, and is made of porcelain. Over this is stretched a teat with a rather broad orifice. When the two parts are thus combined, the child's lips only touch the soft pad of stretched rubber. This is a distinct improvement over the hard bone shield. The combination also enables the child to get the milk with much less suction, and the teat is so formed that it can be cleaned out very easily. The advantages are, therefore, of a kind

which will be appreciated by the babies and their attendants.

### LYNCH'S IMPROVED ENEMAS.

MESSRS. LYNCH & Co. have lately taken out a patent for glass valves to supersede leaden ones in enema tubes, and we understand they are applying this improvement to all their enemas without increasing the wholesale price. The glass valves are entirely free from any chance of becoming corroded, and as they are situated at the extremities of the inlet and delivery tubes they can be easily removed, cleaned, and replaced. They are made of very thick glass, are protected by the indiarubber, and can only be broken by the most wanton carelessness.

### FLETCHER'S NEW LIQUORS.

WE announced some time ago that Messrs. Fletcher, Fletcher & Stevenson had introduced a new series of liquors for the preparation of decoctions, infusions, and tinctures. The chief point of novelty about these preparations is that those of them which have official representatives in both the aqueous and spirituous classes are prepared so that they are suitable for making infusions or decoctions and tinctures. It is now generally admitted that the firm's liquors for making syrups are a distinct indication of pharmaceutical progress, and that it is possible to prepare concentrated solutions of chemical salts, such as the *liquores pro syrupis* are; but there is a reasonable element of doubt existing as to the feasibility of doing the same with drugs. We have therefore subjected the new liquors to some crucial tests, which are calculated to show whether the preparations made from them approximate to the official preparations or not. The makers claim that concentration of the liquors is not obtained by prolonged heating; the aromatic preparations should, consequently, be of full flavour. How far this is the case is shown in the following comparisons:—One volume of the liquor *aurantii* co. was diluted with 19 volumes of water, and the mixture compared with fresh-made compound infusion of orange. The liquor infusion was clearer than the fresh infusion, but the colour was identical, and the flavour of the orange was as delicate as in the fresh infusion. The liquor *gentianæ* co. (*pro inf.*) was similarly compared with fresh infusion. The liquor product was the darker, but it was much lighter in

colour than an infusion made from an ordinary concentrated preparation. The colour was similar to that of the compound tincture, and the odour and taste were like the fresh infusion. The best proof, however, of the value of this liquor was in the amount of solid residue which it yielded, viz., 1.05 per cent., calculated on the infusion, as compared with 1.094 per cent., which Cripps gives as the figure for the fresh infusion. The tincture liquors were equally satisfactory. For example:—

#### *Tr. Rhei Co.*

- (1) Made from liquor, s.g. 0.941, solid residue (1 oz. tincture), 14 grs  
(2) A commercial specimen, s.g. 0.943, " " " 15 "

The colour of No. 1 was somewhat lighter than No. 2, but otherwise both were as alike as two samples of tinctures generally are.

#### *Tr. Cinchonæ Co.*

- (1) Made from liquor, s.g. 0.936, solid residue (1 oz. tincture), 19 grs  
(2) A commercial specimen, s.g. 0.937, " " " 20 "

The comparison of the characteristics of both tinctures showed similar results to the foregoing. The liquor *cinchonæ* co. yielded mixed alkaloids equivalent to 1.4 grain in 1 oz. of the tincture, or equal to two-thirds of the alkaloidal value of a normal bark. This result must be considered very satisfactory, for proof-spirit tinctures of bark seldom represent more than half the alkaloidal value of the bark used. Other of the liquors were examined, with equally favourable results. The comparison between the liquor infusions and fresh infusions is distinctly in favour of the former as regards appearance, while in other respects they are not inferior. As in all cases the degree of dilution is high (*e.g.*, 1 oz. of liquor *digitalis* makes nearly a gallon of infusion), it follows that the proportion of the preservative, or foreign element, is reduced to a minimum. It is not so difficult a matter to produce a tincture of a high degree of concentration, and it is not surprising, therefore, that the liquors for tinctures are so satisfactory. These new liquors have higher claims than for their mere convenience; their potency is unquestionable, and they provide the element of constancy where that can generally not be ascertained, or even obtained, by the ordinary methods.

## Trade Notes.

MESSRS. R. ROUSE & Co., of Wigmore Street, W., have reopened, as a branch, the old-established business of Messrs. Morris & Co., 37 Berners Street, Oxford Street, W.

MESSRS. MATHEY & Co. have established a business as pharmaceutical manufacturers at 23 Rue Beautreillis, Paris. The partnership is entered into for a term of ten years, the capital being 80,000f., of which 30,000f. are "en commandite."

MESSRS. CURTIS & Co., of 48 Baker Street, have bought the sole right to manufacture the effervescing granules as formerly made by Messrs. Young & Postans, and with it have secured the right to use the name of the latter firm in connection with these granules.

MESSRS. LAVANDIER & Co. have commenced business in Paris as perfumers and toilet soap manufacturers at 3 Rue Laffite. The partnership is for a term of twenty years, the capital being 250,000f. (of which 150,000f. are "en commandite"), but it may be increased to 600,000f. by the accession of new partners.

MR. A. DE ST. DALMAS has sent us a sample of hospital strapping plaster, which has been highly spoken of by surgeons. It is a non-resinous plaster spread on holland, and is possessed of great adhesive properties. It is well made, and its value may be judged by the fact that Mr. Walter Bassett, of the Newport Infirmary, says of it, "There is no strapping to equal it."



## TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds for objection to the registration of any of the following marks may, within two months of the date of this journal, give notice in duplicate at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1883, of opposition to such registration." The address of the Patent Office is Southampton Buildings, London, W.O.

From the "*Trade Marks Journal*," November 30, 1887.

"HEDLEY'S PINK LINIMENT," signature &c., on label; for a liniment for horses and cattle. By F. R. Stevens, V.S., Skinnergate, Darlington. 54,699.

"PREMIER," and figure of a thistle; for cod-liver oil. By J. Forbes & Co., Paltenev Town, Wick, N.B. 57,384.

Figure of Atlas and the word "Health"; for a disinfectant. By W. T. Scott, chemical manufacturer, 11 Cromortie Road, Hornsey Rise. 62,779.

"BEETHAM'S GLYCERINE AND CUCUMBER," and other wording on label; for a toilet preparation. By M. Beetham and W. C. Beetham, trading as M. Beetham & Son, dispensing chemists, Cheltenham. 64,304.

"SHAVALINE"; for a shaving-cream. By W. Tapp, hair-dresser, 37 College Street, Bristol. 64,550.

"FENILINE"; for a remedy for hay-fever. By T. G. Gibbons, pharmaceutical chemist, 41 Market Street, Manchester. 64,762.

"DR. RICHTER'S MACOA PILLS"; for pills. By F. Ad. Richter & Co., 1 Railway Place, Fenchurch Street, E.C. 64,896. Also "Dr. Richter's Betel Syrup" (65,142), and "Dr. Richter's Ferrola" (65,143); for chemical preparations (Class 3).

"OSSICURA"; for medicated articles. By G. W. Davis, schoolmaster, Romney Villa, Kingswood Road, Moseley. 64,962.

"HOPE'S ENSILINA," "HOPE'S ENSILLA," and "HOPE'S SILOGENA," each on cross-shaped label; for spices for cattle. By J. H. Hope, agricultural chemist, 55 Charles Street, Leicester.

"THE POLISHING REFLEX SOAP," and figure of a girl, on label; for a plate-polishing soap. By F. Muschamp, 52 Fitzroy Road, Primrose Hill. 65,441.

A series of six labels; for Carlsbad waters (Mühlbrunn, Schlossbrunn, and Sprudel). 65,609-14. And also label with heading, "Natürliches Karlsbader Quellsalz"; for chemical salts (65,605). By Karlsbader Mineral-Wasser-Versendung, Löbel Schottländer, Karlsbad.

"ST. JACOB'S OIL," other wording, and figure of a man; for chemical substances, class 2. By The Charles A. Vogeler Company, 45 Farringdon Street, E.C. 66,346.

Figure of a cross; for aerated waters. By Standard Mineral Water Company, Queen Street, Hulme, Manchester. 66,755.

## Fowler's Solution.

WHEN I was bound apprentice to  
A medico named Squills,  
To be instructed in the art  
And mystery of pills,  
He kept an open surgery  
In the wildest of the West,  
And told me to read, mark, and learn,  
And inwardly digest.

And so I got old "Squire" down  
(The only book I had),  
And sampled Gum acaciæ,  
And found it wasn't bad;  
Then tested A. aceticum,  
As mentioned at page 3.  
And noticed, when diluted well,  
It didn't disagree.

Next A. arseniosum,  
With its Liquor Fowleri,  
I read and marked and also learned,  
But didn't care to try.  
'Twas labelled "Deadly poison,"  
And I, of course, thought twice  
Before I took a swig, although  
It smelt uncommon nice.

Just then a coloured serving man  
Came sneaking to the shop,  
And sniffed about, and said, "Oh, sah,  
Gib Pomp a lilly drop."  
"Get out," said I; "'taint good to drink,  
'Tis poison! Don't you know,  
If you drank this you'd quickly be  
Where naughty niggers go?"

'Twas now about my time for lunch,  
And so I had to leave;  
When I returned an hour hence  
My feelings please conceive.  
That Pomp was in a dying state—  
In fact, I'll tell you what,  
He'd got at Liquor Fowleri  
And polished off the lot.

A pint of Liquor Fowleri!!  
Good heavens, how I ran!  
And luckily caught Dr. Leech  
(Our opposition man),  
Who soon declared poor Pompey's days  
Were drawing to a close;  
He'd never heard of anyone  
Surviving such a dose.

Still, though it was a hopeless case,  
There couldn't be a doubt,  
'Twas proper to give antidotes  
And pump him inside out.  
The which we did, and blistered him  
Until we made him raw;  
Poor chap! he didn't seem to mind,  
He merely mumbled, "More."

We syringed him with water,  
And we closely shaved his head,  
'Plied Ammon. liquor fortior  
Enough to wake the dead.  
We bled, we cupped, we cauterised,  
And greatly wondered why,  
From poison or from remedies,  
The patient didn't die!

Amidst this most exciting scene  
Old Dr. Squills came in;  
We gave him full particulars—  
He only stroked his chin.  
And as in moody thought he gazed  
Upon that prostrate trunk,  
He muttered, "That black rascal is  
Abominably drunk."

"He's poached upon my whisky store—  
That's what he's been about,  
And I compliment you both upon  
The way you've paid him out.  
I think that you've administered  
A lesson sharp and plain;  
And I trust it will be years before  
His wool 'll grow again."

NEMO.

## Saccharin.

WHAT wondrous stuff this coal tar is!  
There really seems no end  
To what you may not get from it,  
'Tis everybody's friend.  
It dyes and cleans, perfumes and lights,  
Is used by serf and queen,  
And now brings forth its latest freak  
They've christened Saccharin.

No Demerara fine or coarse,  
No crystal lump for me;  
A grain or two of this will do  
The work effectually.  
The schoolboy's toffee-swollen cheek  
Will vanish from the scene;  
The labour's less, the pleasure more,  
By tasting Saccharin.

France may as well give up the game,  
The German's beaten beet,  
And brought this cunning compound  
out,  
Three hundred times as sweet.  
The nigger hoeing sugar-canes  
Will never more be seen,  
"Othello's occupation's gone,"  
And all through Saccharin.

For years I have not tasted sweets;  
All sugar in my tea,  
Or in my modest nightcap hot,  
Has been eschewed by me.  
But now no gouty fears need fret,  
Nor dread of twinges keen,  
For thou dost not assimilate,  
My grateful Saccharin.

Had not a chemist found the clue,  
Had he not raised the bar,  
Sweetness and light were hidden fast  
In this despised coal tar.  
So though the craft has bitter wrongs,  
And sour their lot has been,  
The chemist's art will sweeten life  
By making Saccharin.

R. W. C.



## THE "SANITAS" COMPANY, LIMITED, V. GEORGE CONDY.

On October 27, 1887, an injunction was granted, with costs, by the Chancery Division of the High Court of Justice, restraining the Defendant, his servants and agents, from infringing the Company's registered trade-mark "Sanitas" by any use of the term "Sanitas," as applied to deodorant, disinfectant, or antiseptic preparations, soaps and like substances, and from advertising or exposing for sale, or selling or procuring to be sold, any deodorant, disinfectant, or antiseptic preparation not of the Company's manufacture, under the name of "Sanitas" or "Sanitant," or "Condi Sanitas," or "Condy's Sanitant," or under any other name of which the word "Sanitas" or "Sanitant," or any compound or colourable imitation of the word "Sanitas," forms part, or from, in any other way, infringing the Company's said trade-mark.

### CAUTION.

All persons are cautioned against committing any infringement of the Company's registered trade-mark "Sanitas," as in all cases of infringement coming to the knowledge of the Company proceedings will be at once instituted for the protection of their rights.

## Apollinaris

"THE QUEEN OF TABLE WATERS."

### CAUTION.

"The Thames is at present, and is likely to remain, an unsuitable source of water supply for the Metropolis. The pollutions to which it is necessarily exposed are of such a disgusting character as to render its use for drinking purposes undesirable."—LANCET, August, 1887. [2]



## SILICATED CARBON PATENT MOVABLE BLOCK FILTERS.

SEE ADVERTISEMENT, PAGE 19.



## THE "VIKING" ESSENCE OF BEEF AND PURE BEEF TEA IN GLASS.

The "VIKING" Essences are guaranteed perfectly pure. They are delicious to the palate, stimulating to the digestion, and can be immediately assimilated. Most beneficial in all cases of exhaustion. Price Lists, Samples and Analysis from

The Viking Food & Essence Co.  
LIMITED, (1)  
28 Hearn St., London, E.C.

## WOODHALL SPA

### BROMO IODINE MINERAL WATER.

The strongest known Iodine Water in the World.

This remarkable Spa has been purchased by a Syndicate of gentlemen who have determined to make more widely known the extraordinary curative powers of this spring, which contains more Iodine and Bromine than any spring in Europe—  
"And we may safely add, in any part of the World."—Dr. Cuffe, for many years late resident Physician at Woodhall Spa.

An analysis of the water having been made in November, 1886, by Professor Wanklyn, M.R.C.S., corresponding member of the Royal Bavarian Academy of Sciences, Professor of Chemistry, a very important discovery has been made, viz., the presence of Free or Elementary Iodine.

Dr. Wanklyn says—"So far as I am aware, this is the first instance in which free Iodine has been found in appreciable quantity in a natural water. For many years the Woodhall Spa has been celebrated as a valuable remedy in skin diseases. The fact that it is a solution of free Iodine is interesting in this connection, and well worthy of the attention of the medical profession."

The Woodhall Bromo Iodine Water is now being bottled at the Spring by the Sole Agents, BROMLEY & CO., Chemists, 233 High Street, Lincoln, 5 & 6 The Grove, Buxton, and at Woodhall. All communications to be addressed to them at the Spa, Woodhall Horncastle.

## SLACK & BROWNLOW'S COMPRESSED CHARCOAL FILTERS.

See Advertisement, page 19.

## EDITORIAL NOTES.

### FREE TRADE MOVEMENTS ABROAD.

THE all but unanimous adoption of protection as a main feature of the Conservative programme formulated the other day at Oxford renders it well-nigh certain that the issue between Free Trade and Protection will be submitted to the decision of the electorate at no distant period. As a rule the discussion of questions that have been drawn into the vortex of party politics is best left alone in the columns of a commercial journal; but inasmuch as the drug trade must needs be materially affected by any alterations in our fiscal system, it is worth while to take note of the deliberately expressed opinions of druggists in foreign countries who have had practical experience of being protected. It is generally assumed that there is at present a tendency in nearly all commercial countries to raise higher and higher the protective wall which surrounds the citizens of each separate nation; but to the close observer of commercial questions signs are not wanting of impending breaches and growing fissures even where the artificial impediments frown in their most forbidding aspect. Take, for instance, the United States, than which in no other civilised country protection has been carried to greater extremes.

The United States have been protecting their manufacturers to such an extent that the rulers of the country are positively unable to dispose of the money collected at the Customs offices. During the fiscal year 1885 the revenue derived from Customs in the States was over 181 millions of dollars, or about 56 per cent. of the entire public income. In the fiscal year 1886 it was nearly 193 millions of dollars, or 57½ per cent. of the total revenue. Of this enormous sum "chemicals, drugs, dyes, and medicines" contributed in 1886 \$4,347,626, these articles being let off comparatively easily, with an average *ad valorem* duty of 33.97 per cent., while the duty on all classes of merchandise averages 45.55 per cent. The drug market committee of the National Wholesale Druggists' Association, at the annual conference of that body held in Boston in August last, proposed to petition Congress for a reduction of the Customs duties on drugs and chemicals. And it is not surprising that it should be so. The manufacturing trade of the country increases with the growth in population, neutral markets are



opened in other parts of the world, and American manufacturing druggists want to be able to make their goods as cheaply as their competitors. But many necessary ingredients are subject to excessive Customs duties, and they, therefore, naturally agitate for the removal of these impediments. The wholesale druggists profess every possible regard for the "vested interests" that have grown up under the protective system, but yet they enumerate a long list of articles upon which they think "manufacturers might well forego some protection." They suggest that the duties on chlorate of potash, crude nitrate of potash, olive and cod-liver oils, crude glycerine, pearl and pot ashes, boracic acid, flower pomades for making perfumes, and crude beeswax, all of which are now extremely heavy, should be entirely removed. They further recommend the reduction of the duty on citric and tartaric acids, acetate of lead, soda bicarbonate, caustic soda, croton oil, and non-alcoholic proprietary goods by one half, and advise sweeping reductions in a great many other goods, including alcoholic preparations and perfumery, glass, earthen and china ware, chloroform, coal-tar dyes, copper sulphate and strychnine. It is, of course, doubtful whether the American Legislature will agree to the proposed modifications; but the fact that a powerful organisation, representing one of the principal trades of the country, casts its influence upon the side of greater commercial freedom, and is doubtless assisted in this endeavour by other branches of commerce, argues well for the future of free-trade principles in America.

Russia offers another instance of protection *à outrance*. That country only last week made another step upon the road of tariff augmentation. In this instance Germany is principally aimed at, but Great Britain is also made to suffer. But immediately after the establishment of the new duties some of the principal Russian organs openly turned round and advocated a complete reversal of the protective policy in the case of certain countries, such as England. They seriously suggest that an experiment shall be made to admit British goods into Russia upon strictly free-trade principles, at the same time rendering the duties on German goods absolutely prohibitive, so as to punish the latter country for her taxation of Russian agricultural produce. We do not think that this proposal is likely to be accepted, for the Russian Government is financially so much interested in propping up Russian manufacturers that it cannot afford to expose them to all the force of unhandicapped British competition; but the suggestion shows to what unexpected developments a merciless war of tariffs, such as is now being waged between Russia and Germany, may lead. In Germany itself the principal chambers of commerce are loud in their complaints of the badness of trade, which they ascribe to the protective system, and the very manufacturers who pressed for protective duties are now calling out for a return to the free trade policy, averring that they are now strong enough to hold their own unaided. The export of drugs and chemicals from Germany in 1886 declined to the extent of nearly 300,000*l.* in value, and 2,900 tons in weight, as compared with the preceding year, and some of the largest German drug firms, in their periodical reports, indicate in unmistakable terms that they are by no means enamoured with the high duty system. It sounds almost incredible, and yet the possibility is by no means remote, that in the near future, at the very time when the electorate of Great Britain may return a Parliament pledged to the establishment of a protective tariff, other nations, having gathered wisdom by experience, shall break down the impediments to free exchange which they have so sedulously erected, and agree to give one another a fair field and no favour.

## THE SACCHARIN-COATED PILLS PATENT.

SINCE the announcement made by Messrs. Barron, Harveys & Co. that they claimed, under Howie's patent, the exclusive right of employing the new substance saccharin as a principal ingredient in pill-coating compounds, there have been sundry murmurings on the part of competing firms at this invocation of the patent law by a particular firm to secure a monopoly in the use for a certain purpose of an article which all the world can buy. Many people have asked whether such a patent can be valid, and, if so, it has been asked whether it would not be equally possible for some one else to secure the sole right of applying saccharin to this, that, or the other purposes, to the serious detriment of the patentees of the article itself, and to the unfair interference with the public employment of the substance. As regards its use in pill-coating, we observe that Messrs. John Richardson & Co., of Leicester, who are considerably interested in the coated-pill business, have undertaken to bell the cat. In a circular just issued they state that they are distinctly advised that the claim of the London firm already named to a monopoly of the right to use saccharin as a sweetening agent in the manufacture of coated pills cannot legally be maintained, and they offer to supply pearl-coated pills sweetened with saccharin when required by their customers.

Messrs. Barron, Harveys & Co. cannot, without discredit to themselves, disregard this challenge; and the resulting fight promises to possess a marked degree of interest to pharmacists. If it comes off, and if the direct issue involved is fairly raised, it will go a long way towards settling some points which are at present only vaguely understood, at least in the lay mind. It is universally admitted that monopoly in any branch of business is not in itself a desirable thing but it has been found that by no means can an inventor be so conveniently rewarded for the ultimate general use of his discovery as by grant of a strictly limited term of exclusive manufacture. Such grants, however, are very properly regarded with much jealousy by the law, and certain fixed principles have been laid down in numerous decisions which are clearly established. It is required, for example, that a patent to be valid must disclose some invention or discovery, must be novel, and must be useful. The specification, too, must clearly define what is claimed, must not claim too much, and must be strictly accurate in its description. Contests on the specifications, however, are generally technical, and do not concern us now. Nor have we any intention of assuming judicial functions in presenting this item of news. We only aim to show that there are two sides to the question.

The chief ground for questioning the validity of Mr. Howie's patent would be, we apprehend, an allegation that it does not involve any substantial discovery or invention on the part of the patentee.

The idea of sweetening the coating of pills is not new. If the patentee had invented the product as well as its application, his patent for both would have been unassailable. It is not easy to reduce the decisions on the validity of patents to a precise formula, the cases vary so much in their bearings, and in the nature of the subjects for which protection has been claimed. In the gelatine case (*Wallington v. Dale*, 21 L. J., Ex. 49), the invention consisting in the reduction of hides and shavings, or films, whereby the use of blood as a purifier was rendered unnecessary, although it could not be dispensed with when the old pulping process was used, the patent was upheld on the ground that there was a distinct gain in the avoidance of an intermediate step in the manufacture. The application of known processes to different materials (as in *Brooke v. Aston*, 27 L. J., Q. B. 145; and



Key v. Marshall, 2 Web. P. C. 71 and 79 on appeal), on the other hand, has not been successfully patented, the decisions in both those cases being adverse to the patentee. The invention of a new substance, or the application of a known substance in a different manner so as to produce a new result, assuming in the latter case that there is novelty and invention in the application, may be the subject of a patent. The patentees in the event of a contest would, we presume, be called upon to show some degree of invention in the process for which they claim a patent. The opponents would no doubt argue, that having long been known, when a "substitute for sugar" is announced, the application of the substitute to the purposes for which the original article had theretofore been used was not sufficient ground on which to base the claim to a patent for the exclusive use.

Among the reported cases there are rulings in favour of both sides in this dispute. There is, for instance, an often quoted and well-recognised one of Chief Justice Tindal in *Crane v. Price* (1 W. P. C. 377). That eminent judge said "that if the result produced by a combination is either a new article, or a better article, or a cheaper article to the public than that produced before by the old method, such combination is an invention or manufacture intended by the statute." And further on he added, "If the invention be new and useful to the public, it is not material whether it be the result of long experiments and profound research, or whether of some lucky thought or of mere accidental discovery."

That dictum seems to tend in the patentees' favour; but there are decisions at least as weighty on the other side. For instance, in *Rushton v. Crawley* (L. R., 10 Eq. 522), which dealt with a patent for the use of a particular kind of wool for manufacturing artificial hair, Vice-Chancellor Malins said: "It is a gross violation of the privilege conferred upon inventors for a person to take out a patent for a known article which has been used for years, because he finds he can produce a thing cheaper or better by a new material. So far as my opinion goes, the use of a new material to produce a known article is not the subject of a patent, but there must be some invention, something really new, something more valuable to the public than the simple use of a new material to produce a known article."

In deciding against the patent the Vice-Chancellor referred to the case of *Brooke v. Aston*, already mentioned. In that case, which was about a yarn patent, occurred the following expressions of judicial opinion:—

Dr. Campbell said: "In all the cases in which a new patent has been supported there has been some discovery, some invention. It has not been, as in this case, merely the application of the old machinery in the old manner to an analogous substance. That cannot be the subject of a patent." On appeal the opinions of the Judges Cockburn, Willes, Martin, and Bramwell corresponded with that which we have quoted.

There is one other case we may quote, on account of a very clear dictum by Lord Chief Justice Denman. In the case of the *Queen v. Cutler* (Mac. Pat. Ca. 124-138) that learned judge, directing a jury in reference to a part of the case, said: "The patentee had no right to take out a patent for the mere application of particular things to any particular purpose. . . . If he had introduced a new article which required the application of a new principle to the production of it, that might have formed the subject of a patent, but the mere application of a thing which existed before does not appear to me to be a subject of a patent. And in general terms I think that the application of an article to produce any particular result, the party having no claim either to the mode of producing the article or to the mode

of applying it for attaining that result, forms no ground for a patent."

In this case, notwithstanding Lord Denman's expressions, the jury found a verdict in favour of the patentee. A new trial was obtained, and the verdict was overthrown. In addressing the jury on this occasion Mr. Justice Wightman said: "I entertain a strong opinion on this question as to whether a mere application can be the subject of a patent; for whenever you have got a material you may apply it as you think fit."

Lastly we may refer to Lord Abinger's opinion, given in *Losh v. Hugul* (1 W. P. C. 202), that "you cannot have a patent for applying a well-known thing capable of being applied to fifty thousand different purposes to an operation which is exactly analogous to what was done before." The patent in this case was for using with railway carriages a certain kind of wheel which had been already used for carriages on ordinary wheels. Lord Abinger illustrated his argument by asking whether, if some one had invented scissors to cut cloth with, another man could take out a patent for cutting silk with them; or if because mankind had eaten soup with a spoon somebody could take out a patent to eat peas with the spoon?

It is not our business to "dot the i's" in this discussion; the lawyers and the courts will be able to do that. An abstract of the specification of patent in this case will be found on another page in this issue.

## DRUGS FOR THE PARIS HOSPITALS.

THROUGH the courtesy of M. Mourlan, chief of the hospital department, we have now before us full details of the drugs and chemicals required by the Parisian hospital service, and the conditions under which tenders for the supply of these articles during the year 1888 will be received and allotted. One of the first rules of adjudication is that only French manufacturers and dealers will be allowed to compete, and that firms domiciled outside Paris must be represented in the capital by a responsible agent. Permission to compete will likewise be withheld from agents or other parties not being principals, and from previous assignees from whom goods of the same nature tendered in fulfilment of contract have been refused more than once. The French hospital authorities have a perfect right, of course, to decree that the patients under their care shall swallow none but French medicines. They probably believe that this protection benefits the national industry, and it certainly gratifies that peculiar form of "patriotism" which M. Deroulède and his league are promoting so assiduously. But the circumstances under which foreign traders have been debarred from entering the lists of competitors are creditable neither to French logic nor to French commercial honesty. In 1833 it was discovered that quinine manufactured by the "Fabbrica Lombarda" at Milan, which had been supplied to the French hospitals by a Parisian dealer, named Lacombe, was heavily adulterated, only the surface layer in the tins being pure, while the remainder was a mixture of quinine and cinchonidine. Instantly a howl arose from the lower stratum of the Parisian press against the "foreign swindlers," and the indignation redoubled when it was found that the manager of the Milan company "bore a German name." The Milan quinine makers denied having anything to do with the fraud, but they were disbelieved, and had to vindicate their character by commencing criminal proceedings against Lacombe. At the trial it was conclusively proved that Lacombe's own clerk had adulterated the quinine, and the defendant was convicted and sentenced to a year's imprisonment and a fine,



in addition to which his conviction was advertised at his own expense in twelve French journals, and placarded on the door of his own warehouse. But, notwithstanding all this, when the adjudications for 1884 were announced, a proviso was added, and has remained in force ever since, expressly disqualifying foreign manufacturers and merchants from competing. The catalogues containing details of the requirements of the hospital service prominently display the grand old Republican motto, "Liberty, Equality, Fraternity," and though the saying may be true that the French have been so much occupied in enforcing equality all round that they have had no time to bestow upon the propagation of the two other members of their trinity, the conditions of allotment certainly remove any possibility of undue favouritism among those between whom the competition lies. All persons desiring to compete must give written notice, stating their name, occupation, age, birthplace, &c., and deposit a cash security, the amount of which is indicated in the catalogue, and varies from 200 francs to 5,000 francs each lot. In case a tender is not accepted, the security is immediately returned, otherwise it is retained until two months after the expiration of the contract as a guarantee of its proper fulfilment. The quantities required of each article are specified in the catalogues, but the Administration reserve the right to increase or diminish these quantities, to the extent of 25 per cent., at any time during the contract, and without alteration of the tender price. The goods must be delivered at the central warehouse of the Administration at such times and by such instalments as shall be ordered, and will be paid for monthly after receipt. The comparatively insignificant advertising and other expenses incurred by the Administration are divided over each lot in proportion to its importance and must be borne by the allottees. The goods are divided into fifty-three lots. For some of these the Administration has laid down certain quotations, and competitors are invited to indicate the discounts they are prepared to allow off these prices. Selected carrageen moss, for instance, is put at 1f. per kilo., belladonna leaves at 1.10f., coca leaves at 8f., white chamomiles at 3.60f., white beeswax at 4.80f., lavender oil at 20f., rectified peppermint oil (French) at 100f., winter-green oil at 40f., Chinese star anise (unbroken) at 2.25f., soda crystals at 0.10f., sulphate of copper at 0.45f., Calumba root at 1.20f., picked ipecacuanha at 16f., Vera Cruz jalap at 3f., Virginian senega at 5.50f., quassia (in small logs) at 0.70f., new ergot at 6f., cubebs (free from stalk and dust) at 16f., yellow calisaya bark ( $2\frac{1}{2}$  per cent. quinine) at 4f., Japan camphor (refined tablets) at 2.50f., morphia hydrochlorate at 360f., iodine (resublimed) at 42f., potassium iodide in crystals at 32f., quicksilver at 6f., citric acid at 5.50f., tartaric acid at 4.50f., bicarbonate of soda 0.30f., corrosive sublimate at 7f., and rectified chloroform at 5f. per kilo. For other lots, again, no prices are specified, and they are allotted to the firm quoting the lowest net price. An idea of the magnitude of the requirements may be gathered from the fact that the fifty-three lots include over 300 different drugs and chemicals, while the total amount of security to be deposited, which appears calculated at about 10 per cent. of the value, amounts to over 60,000f. The requirements include 24,000 kilos. liquorice root, 5,000 kilos., loxa cinchona, 4,000 kilos. grey Peruvian cinchona, 50 kilos. calisaya cinchona, 60,000 kilos. linseed, 12,000 Senegal gum arabic, 20,000 kilos. castor oil, 15,000 kilos. cod-liver oil, 20,000 leeches, 25,000 kilos. glycerine, 5,000 kilos. "pétréoline blanche, dite vaseline" (in reference to which Colonel Chesebrough should look after his trade-mark), 10,000 kilos. soda crystals, 5,000 kilos. sulphate of iron, 1,000 kilos. refined camphor, 1,800 kilos. potassium bromide, 1,200 kilos. potassium

iodide, 600 kilos. iodoform, 350 kilos. subnitrate of bismuth, about 2,300 oz. quinine, 6,000 kilos. acetic acid, 200 kilos. glacial acetic acid, 700 kilos. chloral hydrate, 800 kilos. chloroform, and 450 sponges. Many of the articles required must of course be of foreign origin, for the simple reason that they are not produced in France, and not all the attempts to shut out Englishmen, Germans, or Italians from the competition will prevent them from reaping indirect benefit from the allotment. The Parisian firms who will tender for the supply of crude drugs must buy the bulk of their requirements in London, and we may be certain that both England and Germany will participate in supplying some of the chemicals. In one respect, however, certain English authorities who are in the habit of periodically assigning the supply of drugs and chemicals for great public departments to certain firms by pure favouritism, and without any regard to economy, would do well to take a leaf out of the book of the Parisian Hospital Administration. In Paris the competing firms bring their sealed tenders to the central office the day before the adjudication. These tenders are placed under lock and key, and the next day they are publicly opened and read out by the chief official, who has previously given notice of the maximum price which the Administration are willing to pay, or the minimum discount which they agree to accept on each lot. The lowest tenders are there and then accepted, and if more than one competitor should offer to supply on equally low terms, the lot is again put up for competition between such firms. Every competitor has a right to be present, and every possible precaution is taken to secure the allotment of goods without regard to personal considerations.

### LOOFABS.

THE loofah or towel gourd (*Luffa Egyptica*) is indigenous to Egypt and Arabia, but is grown extensively in Western Africa and the West Indies. The plant, a cucurbitaceous one, is a climbing vine which frequently attains a length of thirty feet. It is chiefly remarkable for its ovate fleshy fruit, of which it seldom bears more than a dozen, varying in length from six inches to two feet. This fruit in the fresh state is elliptical ovate, and has a green epidermis marked longitudinally with black lines. It is the close vascular network of this fruit, freed from the epidermis, pulp, and seeds, which forms the loofah, so familiar to chemists for a dozen years or more. The natives of the countries in which the towel gourds grow have long used them as scrubbing brushes and as strainers. To prepare them for these purposes the epidermis is removed, and the peeled fruit then thoroughly washed in water and beaten so as to remove the mucilaginous pulp and the seeds. Although loofahs have long been used by natives for washing purposes, we have heard it said that their introduction into this country for similar purposes was a mere accident. A consignment of them was received here, but no one knew what they were for. They ultimately got into the hands of a merchant as payment of debt, and he more than repaid himself by selling them as a sponge substitute for the bath. When the stock was exhausted several years elapsed before another supply was received—indeed, on this occasion they were placed on the market as a perfect novelty. The loofah is imported in the uncut state, our own wholesalers generally giving it the longitudinal incision which makes it a flat and serviceable flesh-brush. The gourd is also used for making fancy toilet articles, which are so highly thought of in the West Indies that a sample (a small basket) was sent to the Queen as a Jubilee present, and was shown in St. James's Palace. Recently the uses of the loofah



have been greatly extended by a German manufacturer established at Halle on the Saale. He makes from them loofah soles, which have to a large extent replaced those made of straw and felt. The loofah soles warm the feet in winter and cool them in summer, keeping them constantly dry. They are extremely elastic and easily washed with soap and water. Saddle under-cloths are also made from loofahs, which have the virtue of preventing the animal from remaining wet under the saddle after sweating. But what may be considered the most important application of the loofah is in the manufacture of surgical bandage stuffs. Bandages made of this material are competing closely with the wood-wool kind, which were introduced some time ago. There are unquestionably other uses to which the loofah might be applied, and as enormous quantities are obtainable at a low rate (some bales were a year ago sold in London at the rate of five a penny), further applications are only a question of time. The seeds of the loofah contain fixed oil, but this in too small quantity (25 per cent.) to pay for its extraction. The mucilaginous matter is so rich in bassorin that an infusion of the fruit becomes almost solid on cooling. A congener, *Luffa Bindaal*, is used in India medicinally as a remedy for carbuncle. For this purpose an infusion of the fruit is used as a fomentation, which causes the slough to come out entire. There are other species which are possessed of medicinal properties. The two species, *L. purgans* and *L. drastica*—the fruits of which are known as American colocynth—possess powerful purgative properties, as might be expected of cucurbitaceous plants. Several are of a bitter character, e.g., *L. cchinata*, an Indian plant, the fruit-fibre of which, according to Dymock, is intensely bitter, and is used medicinally by the Hindoos. This loofah is quite a tiny fruit, being no larger than a nutmeg. As to the use of the ordinary loofah, we find that the uncut kind is much more lasting than the other, although as a flesh-rubber it is not so effective as the interior surface.

The *Public Ledger*. Mr. Fox Bourne has managed to compile two not very lively volumes on the tempting subject of "English Newspapers." The following short record of the origin and history of the *Public Ledger* which he gives will perhaps, however, interest some sections of druggists. Dealing with journalism in the eighteenth century, Mr. Bourne says:—"The most important rival of the *Public Advertiser* at the commencement of George III.'s reign was the *Public Ledger*, a daily register of commerce and intelligence, started on January 12, 1760, by Newbury, the bookseller, in St. Paul's Churchyard, and edited by Griffith Jones. Before it came to be a bald record of commercial items, however, the *Public Ledger* was conducted with much spirit, and provided attractive reading for Tories and others. Goldsmith wrote for it as a 'Citizen of the World,' and received a guinea apiece for two articles each week. 'Unwilling to raise expectations which we may perhaps find ourselves unable to satisfy,' its projectors announced in their first number, 'we have made no mention of criticism or literature, which yet we don't professedly exclude, nor should we reject any political essays which are apparently calculated for the public good.'" Political essays and critical articles are not the main feature of the *Public Ledger* even yet.

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Who was In Mr. Frith's entertaining volume of reminiscences he tells a story which he picked up the Chemist? from a warder at Millbank Prison while sketching convict scenes for one of his paintings. Among the more distinguished residents at that prison had been the famous Mr. Charles Peace. This gentleman had been one day complaining to the warder of the hard fate of a man who found that no one would believe him. As an example, Peace said he once called upon a friend of his, a chemist at Clapham, and was at the time smoking a cigar. "That is a good cigar you have got," said the chemist; "where did you

get it?" "I stole it," replied Peace. "Well, I wish you would steal some for me," was the rejoinder. Peace promised to do so, and a few days afterwards "procured" two boxes of the same brand and took them to his friend. But the chemist would not believe his honest assurance as to the way he had come by them.

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"George Sea- On November 10 last, Mr. George J. Seabury, bury gifes a of the New York firm of Seabury & Johnson, Barty." had graced Mother Earth with his genial presence for exactly forty-three years, and, as is his wont, he gave a birthday party at Delmonico's to celebrate the happy event. The invitations for the dinner, couched in stately English, evince a close study of Milton's poems, the speeches of John Bright, and the discourses of the late lamented Artemus Ward. They run as follows:—

"Dear Sir,—Another chestnut on the tree of time. Thursday, the 10th day of November, is my annual feasting day at Delmonico's. A game dinner will be served, and an entertainment fit for sensible mortals will follow.

"Please omit tin horns, slymbals, trombones, and chestnut bells; they are no longer fashionable.

"Will you be present Thursday evening, the 10th day of November? Dinner at 6 P.M. sharp. Shout by return mail.

"Very respectfully yours,

"GEO. J. SEABURY.

"P.S.—Your everyday hat will fit you next morning."

The guests, forty-three in number (it is one of Mr. Seabury's peculiarities to invite as many friends as he numbers years), partook of an excellent game dinner, at the conclusion of which, instead of indulging in the usual speech-making, they were entertained by the performances of a quartette of singers, a ventriloquist, a juggler, and other artists. The Misses Rena and Eugenia Seabury, daughters of the host, and known among their friends as "Jack and Jill," also contributed to the success of the evening by recitations and music.

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Deposed Doctors.

One of the duties which periodically falls to the General Medical Council to perform is to purge the register of medical practitioners of the names of those who have, in the opinion of the Council, disgraced themselves or their profession. At the meeting of the Council held last week there were several such cases, one of which, viz., that of Mr. Allbutt, of Leeds, has created considerable public interest. The first case heard, that of James McCully, was heard with closed doors. Mr. McCully is a Doctor of Medicine of the Queen's University, Ireland, and an M.R.C.S., and his home was at 14 Halfmoon Street, Mayfair, W. He was recently sentenced at the Central Criminal Court to two years' imprisonment for writing and publishing a scandalous and defamatory libel; this the Council were satisfied was equivalent to misdemeanour, and ordered the removal of his name from the register. The next case was that of Thomas Ormsby Wiley, of Castleview, Newport, I.W., a licentiate of the Royal Colleges of Physicians and Surgeons, Edinburgh, who recently figured in the Divorce Court as a co-respondent, the lady being one of his patients. Mr. Wiley is now abroad. The Council considered his case "infamous," and ordered his name to be deleted. The next case was that of Robert Orme, M.R.C.S., of Carlton Villas, Leigh, Essex, who had acted as "cover" to one James McGowan, of 3 Acorn Villas, Grays, in the county of Essex, an unqualified person, in connection with the National Medical Aid Company (Limited). Mr. Orme placed himself in the hands of the Council, and was forgiven, but was told not to do it again. The most notable case was that of Henry Arthur Allbutt, L.S.A., M.R.C.P.E., of 24 Park Square, Leeds (not Thomas Clifford Allbutt, M.B., of No. 4 in the same square). Mr. Allbutt's offence was that he wrote a book called "The Wife's Handbook," which the committee of the English Council reported had been extensively sold, and which "besides containing much that was offensive to good taste and professionally objectionable, taught how sexual intercourse might be indulged in without fear of pregnancy supervening, but did not distinctly recommend that kind of indulgence unless avoidance of pregnancy was advised by the doctor." Mr. Allbutt had ad-



mitted advertisements for "Malthusian appliances." He was accompanied to the council chamber by Mr. Robert Lamb Wallace, barrister, who conducted his defence, and who maintained that his client had done only what many other medical practitioners do, but he had committed the unpardonable sin of selling his book cheap. Two days were devoted to considering the matter, and ultimately the Council arrived at the conclusion that what Mr. Allbutt had done was to the detriment of public morals, and that his name should be erased from the register. The name of Mr. Henry Francis Partridge was also directed to be struck off the Dentists' Register, the Council, after considering the case, coming to the conclusion that he had been guilty of disgraceful conduct in a professional respect, by wilfully violating a declaration made and subscribed by him, whereby he declared that, as long as he held the diploma of dental surgeon of the Royal College of Surgeons of Ireland, he would not attract business by advertising or other unbecoming means. This is the second time that Mr. Partridge's name has been struck off the register; on the first occasion it was removed simply on the ground that the college had withdrawn his licence, and the Queen's Bench, to which Mr. Partridge appealed, held that the Council had not decided whether or not Mr. Partridge had done anything to justify his removal or not.

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**How to Exterminate Rabbits.** The Government of New South Wales have offered a prize to the discoverer of an effectual means for exterminating the rabbits which infest that colony, and this offer has arrested the attention of M. Pasteur, who in a letter to the *Temps* suggests that what should be done is to use a poison endowed, like the animals themselves, with life, and multiplying with similar rapidity—in other words a disease should be introduced among the rabbits which would become epidemic. There is such a malady, known as the chicken cholera, which has been carefully studied in his laboratory. This disease is common to poultry and rabbits. Among the experiments which he made was the following:—He shut up within a limited space a number of hens. He gave them food tainted with the microbe which is the cause of the hen cholera, and in a short time all of them perished. Sometimes poultry yards are devastated by epidemics of this kind, which spread doubtless through the tainting of food by the droppings of the first sick fowls. The same thing he believes would happen to rabbits, which, returning to their burrows, would there spread the disease. Nothing would be more easy than to communicate the disease to a few of the animals. Round a burrow M. Pasteur would place a movable fence, within which the rabbits would circulate in search of food. Experiments have proved that it is easy to multiply to any extent the microbes of hen cholera in all kinds of flesh soups. If the food of the rabbits were watered with these liquids full of microbes, the animals would catch the disease, and spread it everywhere. M. Pasteur adds that the disease of which he speaks does not attack four-footed domestic animals, and as fowls do not live in the open country there would be no risk of destroying them. It is impossible to avoid the opinion that the deliberate introduction of a disease like this is a gross violation of natural laws, which could hardly fail to bring some punishment in its train.

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**Cuttlebone Prospects.** The *Oil, Paint, and Drug Reporter* reviews the prospects of the cuttlebone market, and concludes by predicting lower rates than the present New York prices of 17½ to 18 cents per lb. This price, it says, leaves a handsome profit to the holders, who are inclined to let the market run its course. The consumption in the United States is increasing, but there is enough stock to last until the next catch, and meantime the deliveries of 1887 bone on contracts to the importers will swell the spot supply considerably. Last spring it was cabled from Trieste that the catch of cuttlefish would be a very small one, and when the fishing season was over these reports received ample confirmation. The catch amounted to only one-third of an average, and the result was an immediate advance in prices at Trieste, the principal port of shipment, where prices still remain high. But New York carried a heavy stock from preceding seasons, and has not therefore responded in any appreciable degree to the Trieste movement.

**Hyponitrites in Dispute.** At the meeting of the Chemical Society held on November 17, there were two notes read, which, although referring to matters of little pharmaceutical interest, are yet interesting from the fact that one of them, by Professor Divers, F.R.S., of Tokio, is virtually a charge of repetition against Professor Dunstan and Mr. Dymond, who some time ago communicated a paper to the society on the formation of hyponitrites. In that paper they stated that they were "unable to confirm the statement made by Divers and Haga that ferrous hydroxide in presence of alkali does not form hyponitrite from nitric oxide." Professor Divers, in a reply note, points out that this statement does not occur in his paper; all he said was that hyponitrites could not be detected. Professor Dunstan neatly responds to this by saying that if Professor Divers had believed that hyponitrite is formed in the circumstances he should have said so. Professor Divers successfully disposes of a statement attributed to him that "the formation of hyponitrites is due to the direct withdrawal of oxygen from the nitrite or nitrate by the metal," by saying that he has as yet no clear notion of the constitution of hyponitrites, and has not offered any formal theory of their formation, except it be the one which Dunstan and Dymond have advanced as their own. In his third charge Professor Divers states that Dunstan and Dymond find him to suggest "that a compound of the formula  $\text{NaNO}_2$  is formed by the substitution of two atoms of sodium for one of oxygen in the nitrite  $\text{NaNO}_2 + 4\text{Na} = \text{NaNO}_2 + \text{Na}_2\text{O}$ . But at the place referred to (Trans., 1883, 458) there is only the equation  $\text{Zn}(\text{NO})_2 + 4\text{Zn} = \text{Zn}_2\text{N}_2\text{O}_2\text{Zn} + 2\text{ZnO}$ , together with words which have rightly led the authors to write  $2\text{Na}$  for  $\text{Zn}$ , and halve the formula. Of the substitution of metal for oxygen there is neither word nor implication in his paper." "The authors," he continues, "have, by some strange error, written, three times over, as my formula,  $\text{NaNO}_2$ . Such an unjustifiable mode of writing may serve to illustrate the absurd view they attribute to me, that two atoms of sodium are substituted for one of the atoms of the oxygen of the nitrite (1), but no such view is expressed or countenanced in any paper of mine. The authors will, I am sure, agree with me that a position-formula, which contains two or more groups of atoms of the same element, does not preserve its meaning when rewritten with another arrangement of its symbols." To this Professor Dunstan replies:—"The 'absurd view' that we had attributed to Dr. Divers has arisen from a misunderstanding of his formula  $\text{Na}_2\text{NONa}$ , or, as we had written it,  $\text{NaNO}_2$ ," &c. Professor Divers finally asserts that the theory which Dunstan and Dymond have advanced as explaining the formation of hyponitrites is essentially the same as was given by him in a paper on the "Production of Hydroxylamine from Nitric Acid," and to this Professor Dunstan replies by pointing out that Professor Divers admits that he has not fully discussed the general question, and was not even in possession of the facts which the later hypothesis was devised to explain. Professor Dunstan's reply is contained in a note appended to that of Professor Divers.

THE Massachusetts courts have decided that a five-cent cigar is not a drug, and have fined a druggist 10s. for selling one on Sunday.

A GERMAN TRADE JOURNAL recently contained the following advertisement:—"Wanted, for the sale of oils and varnishes, several travellers on commission. The latter, when in a dry state, are bright and hard; they do not crack or peel off, and are sold in bottles and jars bearing the brand of our firm on the outside."

A MAN met his doctor on the street and complained of rheumatic pains, for which the doctor recommended him to take a pinch of "nitrate of potash" two or three times a day. Shortly afterwards he met the doctor again and, in reply to a question regarding his health remarked, "Oh, I'm getting well, doctor, but tain't your medicine. I tried that for some time, till a neighbour told me of something he took for his rheumatism—a very simple remedy. I tried it, and it's done me a great deal of good." "What is it?" said the doctor. "Oh, it's simple; I'm afraid you'll laugh at me if I tell you." The doctor promised to control his risibles, and the patient, after much urging, informed him that it was "saltpetre." The doctor's smile was longer than the street.



## Medical Cleanings.

### MOSS AS A DEODORISER.

MR. H. A. LEDIARD, F.R.C.S., of the Cumberland infirmary, reports favourably on the use of moss (*Sphagnum* sp.) as a deodoriser for surgical purposes. The best way of applying it is as pads enclosed in muslin bags. The moss is wetted with the usual antiseptics, such as boracic acid and corrosive sublimate solutions.

### SEA-SICKNESS.

DR. DONNELLAN, s.s. *City of Rome*, suggests in the *Lancet* the following treatment:—Before emesis has set in give an emetic of hot water or sea-water. If the bowels are confined give an enema. Then make the patient lie down and give a draught containing 1 drachm of solution of bismuth,  $\frac{1}{2}$  drachm of aromatic spirit of ammonia, with 1 minim of chloroform and ipecacuanha wine in each dose, to be repeated every two hours, with plenty of ice to suck.

### SILVER PIGMENTATION OF THE SKIN.

THAT characteristic slate-blue colour of the skin which is sometimes seen in persons who have undergone a course of treatment with nitrate of silver may, after all, be due to the mere application of lunar caustic to the epithelial surfaces, such as the throat. Several practitioners mention cases in the *Brit. Med. Jour.* in which the application of nitrate of silver solution to the tonsils was followed by the objectionable pigmentation. Dr. Baron, of Clifton, in noting a case, throws out the hint that this is probably one more fact which bears out the modern theory that the tonsils have a good deal to do as absorbent glands. One result of the disclosure will probably be the discontinuance of this very heroic and destructive throat application.

### PURE BENZOL IN WHOOPING-COUGH.

DR. JOHN LOWE speaks highly (*Brit. Med. Jour.*) of the efficacy of benzol in whooping-cough after the acute stage is past. He gives it in the form of a mixture, of which the following is the formula:—

Benzol puriss.	..	..	..	..	℥ 32
Glycerin. pur.	..	..	..	..	℥ss.
Ol. mentha pip.	..	..	..	..	℥ x.
Syr. mori	..	..	..	..	℥ss.

M.

The dose of this for a child of four or five is a teaspoonful every two hours. The taste of the mixture is not unpleasant. Benzol has the properties of diminishing expectoration and decreasing the spasmodic nature of the cough.

### ANTISEPTIC CANDLES.

IODOFORM is recommended by Messrs. Casson, M.R.C.S. and Brownen, F.C.S., to be combined with candles to form a sort of automatic disinfectant. The power of iodine in this respect is well known. When iodoform is heated it decomposes, iodine being one of the products; but as this does not take place regularly the iodoform is combined in the candles along with salicylic acid, so that while the candles are burning both iodine and phenol are given off. The candles have been found useful for the sick-rooms of those suffering from asthma, spasmodic cough, and "hay catarrh," the patients experiencing great relief from them. The smell of tobacco smoke is quickly and entirely destroyed by the combustion of these candles in the smoking-room, and the air of stuffy rooms and closets may be rapidly purified by the same means.

### METHYLAL.

AT a recent meeting of the Medical Society of London Dr. B. W. Richardson read some notes on methylal, in which he described its chemical properties and physiological action. Dr. Richardson's previous observations on the subject, which in the present instance were partly repeated, will be found in this journal of February 12, 1887, page 183. He now throws out some valuable suggestions regarding the use of methylal with other anæsthetic bodies, with which it may be combined as a menstruum. For example, in the treatment of angina

pectoris he uses a mixture of 10 parts of amyl nitrite and 90 of methylal. The vapour given off by this mixture is extremely pleasant, and the methylal has the effect of making the action of the nitrite less sudden and much more prolonged. Another combination is one of methylal with pure anhydrous ethylic ether. As the boiling-points of these two fluids, their vapour densities, and their specific weights are closely allied, and as both contain the same elements, Dr. Richardson thinks they will form an excellent anæsthetic compound, the solubility of their vapours in the blood being considerably greater than when ether is used alone. So far, this mixture has given favourable results. Incidentally Dr. Richardson calls attention to the extreme difficulty of ridding methylal of the last traces of acetone, which vitiates its action, and is probably present in most commercial samples.

### APOMORPHINE FOR COUGHS.

DR. R. W. WILCOX, of New York, has had the privilege of seeing about a thousand cases of bronchial affections treated with apomorphine, and is, therefore, entitled to be listened to when he speaks of it as he does in the *St. Louis Med. and Surg. Journ.* He remarks that it is only old green solutions with excessive doses which cause prostration and unpleasant effects. It is in acute bronchitis that he has found it specially suitable, and the mixture which he recommends is:—

Apomorphinæ	..	..	..	gr. ss. ad j.
Potassii bromidi	..	..	..	℥ss.
Tincture sanguinalis	..	..	..	℥i.
Syrupi tulatani, q.s.	ad	..	..	℥iv.

M. et ft. sol.

S.: Teaspoonful every two or three hours in a wineglass of water.

Dr. Wilcox pays a poor compliment to American pharmacists by saying that the sanguinalia is added for the benefit of the apothecary, showing him that it is a cough mixture; otherwise he would alarm the patient by telling him that it was an emetic, a circumstance that has happened more than once.

### THE DOSAGE OF COCAINE.

THE *Lancet* states that it is impossible to name a dose of cocaine that is safe for all individuals, since many persons are unfavourably affected by even small quantities. As a general rule no external application weaker than 20 per cent. is satisfactory. Taken internally, cocaine may be exhibited in doses of from  $\frac{1}{4}$  grain to 1 grain. For hypodermic administration a 10-per-cent. solution should be employed, but not more than 10 minims used. In operating for fistula, for the removal of small tumours, or for circumcision, first paint the surface with a 20-per-cent. solution, then wait five minutes; after this inject hypodermically 1 or 2 minims of a 10-per-cent. solution by various punctures around the seat of operation. To extract teeth under cocaine, at least 1 grain must be injected into the submucous tissues by three punctures opposite the root or roots of the tooth to be removed. Operate ten minutes after this. Great care is needed, as cocaine produces faintness, and in some persons a degree of collapse very alarming, and not devoid of danger. Cocaine rapidly develops fungus, which renders its solutions dangerous.

### SUBLIMED SULPHUR IN DIPHTHERIA.

MR. VALENTINE KNAGGS has recently written a treatise on the cure of diphtheria by means of the frequent administration of small doses of sulphur. We now learn that Dr. Schnyder (Lucerne) speaks highly of insufflations of sublimed sulphur, as recommended in 1870 by Dr. Alb. Lutz (Würzburg). Dr. Schnyder has used this plan of treatment for seventeen years without a single failure. He applies the sufflations every two, four, or six hours by means of a tube, blowing the powder freely over all the parts affected. When the fauces are covered with profuse frothy mucus, it is advisable to brush this away before applying the powder. The procedure is so simple that a person of average intelligence can carry it out quite effectively. Dr. Schnyder points out that it is of paramount importance to employ the sublimed and not precipitated sulphur. It is a curious fact that both Mr. Knaggs and Dr. Schnyder speak so warmly of similar treatment, and that Mr. Knaggs uses *precipitated* (milk of) sulphur internally, while Dr. Schnyder uses *sublimed* sulphur topically.



## Foreign and Colonial.

**CURIOUS CASE OF TRICHINOSIS.**—A strictly orthodox Jew died at Inowrazlaw in Poland the other day from trichinosis.

A WELL-KNOWN manufacturer of bitters in Germany has had to pay 62,619.25 marks (about 3,150*l.*) excess of duty on his stock of bitters and liqueurs under the new German spirit law.

**DEPOSITS OF INFUSORIAL EARTH** have, it is reported by H.M. Consul-General at Christiana, been discovered in the neighbourhood of Stavanger. It is calculated that the pits are capable of yielding 400,000 cubic metres of an earth free from sand and gravel, and containing 85 to 95 per cent. of silica.

**RUNAWAY PHARMACISTS.**—When the cholera epidemic broke out in Sicily about two months ago several local pharmacists fled from the afflicted districts. They returned when the scourge disappeared, and have now been sentenced by the Messina Court of Justice for dereliction of duty to a fine of 2*l.* each and the prohibition of exercising their business for the space of three months.

AT the last meeting of the Board of Directors of the Chemische Fabrik auf Actien (vormals Schering) in Berlin, it was stated that the turnover of the works during the first nine months of this year showed an increase of 20,000*l.*, as compared with the corresponding period of 1886. The prices of chemicals were, on the average, slightly higher than last year. It has been decided to drop the proposed erection of an aluminium-works.

**PHARMACISTS DULY QUALIFIED IN OTHER COUNTRIES** are not now, it appears, allowed to commence business as chemists in Brazil. They must again qualify by passing the examinations according to the Brazilian law. Such, at least, was the decision of the department of "Inspectoria Geral de Hygiene," which recently refused permission to Mr. Henrique Brandes, a German pharmacist duly qualified in his own country, to conduct a pharmacy which he had purchased at Blumenau, a German settlement in Brazil, until the applicant had qualified according to Brazilian law.

A COLLEGE OF MEDICINE FOR CHINESE STUDENTS was opened at Hong Kong on October 1. The following are among the teaching staff of the college:—Dr. Ho Kai, Professor of Forensic Medicine; Dr. J. P. Jordan, Professor of Surgery; Dr. D. Gerlach, Professor of Materia Medica; and Mr. W. E. Crow, Lecturer on Chemistry. The facilities for teaching medicine in Hong Kong are greater than in any port in China, and it is anticipated that the establishment of this college will have a considerable influence in fostering Western methods of practice. The curriculum of study is the same as is followed in this country.

**OILS AND CHEMICALS IN THE CAUCASUS.**—A correspondent of the *Chemiker Zeitung*, writing from the Baku petroleum district, states that the Russian Government have now definitely decided upon the construction of tube lines for the conveyance of kerosene and naphtha from the producing districts to the Black Sea. Whether the lines will be laid to Poti or to Batoum is not yet known. One of the principal effects of the lines will be to render available for commerce large quantities of crude material, especially naphtha residue, which are now wasted on account of the difficulties of conveyance. Boring experiments are now also being made in the neighbourhood of Tiflis, and a project has been formed for the establishment of a naphtha-soap works. About thirty-five versts from Tiflis a manufactory of Glauber salts is now in full swing. The crude material is found in layers over three fathoms thick as almost chemically pure sulphate. There is an idea that it might be converted into carbonate or caustic soda for use in the local petroleum works, which at present import all their requirements for this purpose from England. So far the consumption is limited to a local glass manufactory and a few druggists' shops in Tiflis. Alum is also largely imported from abroad for water purification, although 90 per cent. aluminous shale is found near Elisabethpol. There are five or six sulphuric-acid works at Baku.

**DRUGGISTS "ASSIGNMENTS" IN AMERICA.**—Messrs. John F. Henry & Co., of New York, have made an assignment to Mr. O. Frickenhaus, and made the following statement with regard to their affairs:—"The firm has been carrying a heavy indebtedness since their failure in 1878, caused by the failure of E. J. Demming, Jun., the note-broker, who was indebted to them \$100,000. Nothing has ever been collected on this claim. The tight money market this fall has cut down their sales, and collections have fallen off in consequence, so that they have been unable to meet their payments. Mr. Frickenhaus, the assignee, is already engaged in taking stock, and will be able to make a report at an early day. A member of the firm says that they will be able to liquidate their debts in full, he believes, if the creditors will grant an extension, which several of the largest have already agreed to. A meeting of the creditors has been called for October 28." The Cleveland Drug Company, of Cleveland, Ohio, U.S.A., have also made an assignment, and the following statement is made with regard to the position of the firm:—"The company is the successor of Messrs. Keeler & Smith, who began business in 1874. Ten years later the Keeler & Smith Drug Company was formed, and in 1886 this was merged into the Cleveland Drug Company, with a capital of \$100,000, three-fourths of which is paid up. The house has had quite an extensive trade in the middle and western States, and some of its specialties have a wide sale. For several months past the business affairs of the company are said to have been in an unsatisfactory condition. It is estimated by the book-keeper of the company that the assets of the concern will exceed the liabilities by fully \$10,000. An estimate places the assets at \$60,000. The president of the company is Mr. James Cunnea, Mr. E. A. Schellentrager its secretary, and Mr. S. S. West manager.

**NEW PORTUGUESE CUSTOMS TARIFF.**—A new customs tariff came into force in Portugal on October 1 last. It contains the following provisions regarding drugs and chemicals.\*

Articles which are free of import duty, but subject to a tax of 2 per cent. *ad valorem* for works in harbours and bars:—Sulphur (refined or unrefined), metallic antimony (pure or sulphurated), quicksilver, plants and seed for cultivation, resins, gums, and resinous gums, concrete fixed oils, volatile turpentine oils, indiarubber and gutta-percha, oleaginous seeds not otherwise mentioned, dry materials for the arts, vegetable materials not classified, colouring materials and products, bromine, iodine, and phosphorus, arsenic acid, pyroligneous acid marking 6° in the Beaumé hydrometer, acetates of soda and of silver, carbonate of soda (natural), borate of soda, chloride of calcium, boxes of chemical preparations and copies for study. The following are subject to duty, which, except where otherwise specified, is levied in *reis* per *kilo.*:—Sulphuric and hydrochloric acids, 1 *reis* per *kilo.*; nitric acid, 30; saltpetre, 35; sulphate of soda, potash, copper, or iron, 5; carbonate of potash, raw, 7; carbonate of potash, refined, 55; carbonate of soda, refined, dry or crystallised, 15; chlorate of sodium; caustic alkali, solid or liquid, 10; chemical products, not otherwise distinguished, 12 per cent. *ad valorem*; cotton-seed oil, 800; fixed oils, vegetable, not otherwise mentioned, 50; volatile oils, not solid and not elsewhere specified, 700; camphor, refined, 100; oleaginous cotton-seeds, cleaned, 30; cork-tree bark, 4; cork-wood, manufactured, 9; fruits and seeds for distilling, not otherwise mentioned, 15; vegetable juices and materials, not otherwise mentioned, 7 per cent. *ad valorem*; soap, 50; gelatine, glue and fish gum, 60; glues, not otherwise mentioned, 10; wax, raw, cleaned, or its residues (gross weight), 20; candles of any description, 80; ink (including the tare), 50; varnishes, colours, and inks, not solid, not otherwise mentioned (gross weight), 30; blacking (including the tare), 80; acids, fatty, and margarin, 60; medicinal substances and perfumery, not elsewhere specified 7 per cent. *ad valorem*; medicines, not otherwise mentioned (including the tare), 300; perfumery of every description (including bottles, but excepting the boxes of paper or wood), 220, including 6 *reis* per *kilo.* for custom-house fees, and 14 *reis* per *kilo.* harbour works tax; cocoa and cocoa husks, 30; chocolate, 130; pepper, 30; and spices, 130 *reis* per *kilo.*

\* Kilogramme = 2.204 lbs. avoirdupois, decalitre = 2.2 imp. gallons, milreis = 4*s.* 6*d.*



## JACOBS v. RUSSELL.

## JUDGE'S DECISION.

THIS case came up for decision at the Sheffield County Court on Thursday. Judge Bedwell, who heard the case, said it was an action in which Emanuel Jacobs, trading at Sheffield as the "Yorkshire Veterinary Patent Medicine Manufacturing Company," sued Mr. Alfred Russell, of Liverpool, grocer, for the sum of 3*l.* for goods sold. The defendant had filed a counter-claim for 7*l.* 19*s.* 9*d.* as damages, occasioned to him by the false and fraudulent misrepresentations of the plaintiff and his agents in reference to the professed sale of the goods sued for. The defendant had also paid into court a sum of 3*s.* 3*d.* and costs on that amount. Plaintiff's action was for goods sold and delivered, and in support of his case two witnesses were called—Thomas Markham and Simeon Jacobs. Markham was the plaintiff's traveller, and he simply proved that he got the order for the goods. Undoubtedly the word "order" was used in all the cases, but the point was whether they gave the order as agent or purchaser. The plaintiff said the order-form, which was produced, was for goods sold and to be delivered in the usual course of business. The defendant said he never gave any order whatever in the sense of buying the goods, and all he did was to accept an agency that was offered to him by Markham. According to the evidence of the defendant and his wife, Markham said he wanted to appoint one agent for a certain district of Liverpool, and he told such a tale that the defendant accepted the agency. The only portion of the goods sent by the plaintiff that he (defendant) sold were of the value of 3*s.* 3*d.*, and they included some pills which he gave to his dog, but which made the animal very ill. But he found out that there were other agents in his district. The correspondence between the parties showed clearly that the defendant, after the goods were sent him, looked upon himself as the agent of the plaintiff. A number of witnesses were called in support of the defendant's case, and he (the Judge) admitted their evidence, although Mr. Wilson (the plaintiff's solicitor) objected to it going in. Three of them proved that Markham came to them and said he wanted to appoint them agents, and that they ultimately accepted. The question that he (the Judge) had to decide was whether the conduct of Markham in getting the orders was a fair transaction or a fraud. The so-called signed order was, on its face, partly an agency matter, because it contained the price per dozen, and the price at which they were to be retailed. Now that clearly showed that the position of Russell under this order-form was that he was to be an agent, and bound to sell the goods at a certain price. The principle of agency was in one part of the form, but the words "5 per cent. for cash, or three months' nett and three months' credit," were terms wholly inconsistent with agency. The invoice sent with the goods showed quite a different thing. The transaction had entirely changed. The figures that constituted the agency disappeared from the invoice, and the invoice was that of an ordinary transaction for goods sold and delivered. "Milk fever preventable drinks at 1*s.* 9*d.*. Six of them 10*s.* 6*d.*" In the order-form which was signed the milk fever preventable drinks were set down at 2*l.*s. a dozen, retail at 2*s.* 9*d.* each. He said that it came to this:—Plaintiff's traveller went into the defendant's shop and got the consent of the defendant to be an agent. Having done that he got him to sign an order-form, part of which was consistent with defendant being agent, and the other part entirely inconsistent. Having got the order-form, the plaintiff sent an invoice which was inconsistent with the order-form. Proceeding, his Honour said: I say this is a gross fraud, a deliberately preconceived and systematic fraud, and it consists of three stages. The first is to get a tradesman to become agent on the false pretence that he is to be sole agent for a particular district, whereas, in point of fact, other agents are appointed directly, if not before, for the same district. Then the next stage is that, having got him to be agent, he gets him to sign a document which is beyond agency (part of it really is the form of an ordinary transaction—purchase and sale), and having got that order-form, the third stage is to send an invoice which is inconsistent with agency altogether, and which is, pure and simple, an order for the sale

of goods. I say, can such a transaction stand? Undoubtedly not. On every principle of justice and right such a transaction as that must fall to the ground. Will anyone believe that Mr. Russell, or one of the witnesses who were called, ever understood or dreamt that they were giving an ordinary order for goods in the ordinary form of transaction, sale and purchase? If so, what was the necessity of talking about agents? Suppose a traveller had gone into one of the shops and said, "Will you give me an order for the veterinary drinks of such a man?" what would the answer be? "Certainly not; I don't deal in those things." But he gets an order in this insidious and very ingenious form, and he carries it out from what is ingenious and subtle to a downright fraud. I say such a transaction cannot stand, and I find my verdict for the defendant. On the counter-claim he is entitled to nominal damages. I do not see he has sustained any except through his own fault in not seeing what, when calmly looked at, was a transparent fraud. He ought to have found it out sooner; it does appear to me to be a case of the highest importance, not only to these particular people in Liverpool but to commercial people generally, and to commercial integrity. I allow costs on the higher scale, and 1*s.* damages on the counter-claim.

Mr. Wilson asked whether his Honour would give leave to appeal, but the Judge said he had no doubt whatever in his own mind as to the law in the case, and his feeling in the matter was to refuse. He added that he was decidedly against giving the slightest chance to a transaction of this kind. Ultimately his Honour refused Mr. Wilson's application for leave to appeal.

## Dental Notes.

**SOLDERING PLATINUM TO GOLD.**—Mr. E. L. Keys states (*Jour. Brit. Dent. Assoc.*) that platinum may be soldered without difficulty to gold by melting a small piece of pure gold on that part of the platinum that is intended to come in contact with the gold plate, after which it can be easily soldered effectually. This applies to any quality of gold plate.

## MOUTH-WASH FOR SPONGY GUMS.—

Resorcin .. .. .	3ij.
Fluid extract of eucalyptus .. .. .	5j.
Water to .. .. .	3iv.

Rub up the resorcin and fluid extract with 2 drachms of magnesium carbonate and filter.

One teaspoonful to tumbler of water is to be used frequently.

**PREPARATIONS FOR THE TEETH.**—Dr. Miller, of Berlin, recommends the following useful formulæ:—

Calci carbon. precip. .. .. .	3½ oz.
Cort. cinchon. pal. .. .. .	15 drachms
Conch. preparat. .. .. .	75 "
Pulv. myrrh. .. .. .	12 "
Pulv. carophyll. .. .. .	3½ "
Ol. cinnamomi .. .. .	10 to 15 drops

M. Fiat pulvis.

The following is recommended as an efficient tooth-soap:—

Magnesie carbon. .. .. .	75 grs.
Pulv. irid. florent. .. .. .	75 "
Talc. .. .. .	75 "
Pulv. sapo alb. .. .. .	75 "
Ol. menth. pip. .. .. .	10 gtt.
Mucilag. gum arab. .. .. .	q.s.

## ANTISEPTIC MOUTH-WASH.—

Sodæ bichloratis .. .. .	Parts
Thymol .. .. .	1
Aquæ destill. .. .. .	300

Ft. sol.

This preparation is said to be an excellent corrective for fetid breath, when it proceeds from decaying matter in carious teeth, &c.



## Trade Report.

*Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.*

*It should also be recollected that for many articles the range of quality is very wide.*

42 CANNON STREET, E.C., December 1.

A "BOOM" such as has not been witnessed on our market for a very long time has set in since our last report, and affected, among others, such widely different articles as quicksilver, quinine, camphor, shellac, citric acid, &c. Mincing Lane is again commencing to wear the old-time aspect. Money is being made fast in all directions, and everybody appears happy and anxious to make hay while the sun shines; for it cannot be denied that no genuine consumptive demand underlies the present movement, but that it is exclusively based upon speculative undertakings, which may, of course, be well founded and successful, but which have too often, in the past, proved nothing but the precursors of a state of things worse than the habitual dulness to which we have lately been accustomed. The public sales all passed off quietly, but privately a very brisk business is doing. To-day's drug sales were heavy, and had to be partly postponed until to-morrow. Among the articles which are dearer since last week are quinine, quicksilver, mercurials, citric acid, camphor (crude and refined), cardamoms, musk, Jamaica sarsaparilla, senega, star-anise oil, squills, saffron, orris root, beeswax, shellac and turmeric. On the other hand, cream of tartar, ipecacuanha, senna, vanilla, and spices are lower.

During the week a requisition was handed round for signature among the frequenters of the Royal Exchange requesting the Gresham Committee to close the gates at 3.45, so as to ensure an earlier meeting hour than that hitherto prevailing (3.45 to 4.15 P.M.). The requisition has been pretty largely signed, and to-day, in accordance with its contents, the usual meeting was held from 3.15 to 3.45. The alteration came as a surprise upon many of the druggists, several of whom arrived at the accustomed hour only to find that all was over. A kind of indignation meeting was held by the disappointed parties outside the building, at which the action of the promoters of the alteration in not giving proper notice was commented upon in severe terms.

It had been announced in somewhat ambiguous language that a new departure would be made at to-day's auctions as regards the sale of vanilla, an article which has been a veritable apple of discord between druggists and brokers lately. At 10.45, the usual hour for commencing the auctions, the sale room was almost empty, and at 11 o'clock, when Mr. Green, of Brookes & Green, mounted the pulpit, only about two dozen persons, mostly brokers, were present. Mr. Green briefly announced that it had been decided by the brokers to make the experiment of offering all the vanilla in the catalogues successively before the commencement of the drug auctions proper; and, instead of beginning the sale at 10.45 as usual, it had been resolved to start at 11 o'clock, which, personally, he considered a mistake ("hear, hear," from Mr. Ziegele). He then proceeded with the sale of vanilla. The large majority of the druggists were conspicuous by their absence, having apparently resolved to have no part or lot in proceedings clearly intended to checkmate them.

When the bulk of the vanilla had been disposed of (by which time most of the druggists had put in an appearance) Mr. Barron rose and asked the then presiding broker (Mr. Peat) the reason why the druggists should have been so badly treated in the matter of the vanilla sales. He (Mr. Barron) had been informed by a letter from Mr. Figgis that it was proposed to alter the hour of the commencement of the drug sales to midday and dispose of the vanilla beforehand. He did not agree with this proposal, and therefore took this opportunity of bringing the matter forward. Mr.

Green considered that it was a mistake to have announced the vanilla sales for 11 o'clock, because 10.30 would have been more convenient for the trade. Mr. Lescher did not approve of the sale of vanilla along with drugs, and thought that the two should be auctioned separately. Mr. Peat would be only too pleased to meet the requirements of the trade, and suggested that brokers and buyers should hold a meeting to consider the question. After some further discussion Mr. Blum (A. Faber & Co.) remarked that the home druggists were after all not the only parties interested in the question. His firm and other export druggists were in the habit of buying vanilla, and they, and also the brokers, ought all to have a voice in the matter. Mr. Peat, always making it a habit to act on the give-and-take principle (though he liked taking best), suggested as a good way out of the difficulty that vanilla, whenever there were more than 120 tins to be sold, should be offered separately at 10.30, and the sale of drugs proper begin at 12 o'clock. He moved a resolution to this effect, which was duly seconded and carried, Mr. Raiser alone openly dissenting.

ACID (CITRIC) has suddenly advanced; on the spot 1s. 7½d. has been paid, and 1s. 8d. for forward delivery. The stock of lemon juice is very small, being only about 400 pipes. The new juice will be put on the market in Messina in January next, but it is not yet known what the result of the new season's yield will be.

ACID (TARTARIC) unchanged at 1s. 6½d. for *Foreign*; *English* steady at 1s. 6½d. to 1s. 6¾d. per lb.

ALKANET ROOT.—A parcel of 34 bags ordinary damaged offered "without reserve" failed to attract a buyer.

ALOES.—The demand for *Cape* aloes did not show any alteration. A fair quantity was offered at the auctions, and sold, perhaps, a fraction lower, say at 24s. to 25s. for good bright hard, 19s. to 23s. 6d. for more or less drossy, and down to 14s. per cwt. for common and soft. *Curaçao* aloes neglected. A small quantity only was shown, and 20 boxes dark capey sold, without reserve, at 21s. per cwt. *East Indian* (Socotrine) good dry brown are held at 9l., 25 kegs tough soft brown at 5l. (an offer of 4l. 5s. being refused), while 2 boxes dry Zanzibar sold at 5l. per cwt.

AMBERGRIS.—Several tins were offered for sale, but they did not include anything of superior quality. The best lot, bold dark and grey pieces, rather soapy, sold at 82s. 6d. per oz. Other lots are held above value, at 70s. to 100s. A tin of spurious dark pieces, offered "without reserve," could not find a purchaser, even at 1s. per oz.

ANNATTO without any change. Two lots fine bright red *Pará roll*, together 29 baskets, were bought in at 1s. 5d. and 1s. 6d. per lb. respectively. *Seed* unaltered; fair to good bright Ceylon, 2½d. to 3½d. per lb.

ANISE.—*Russian* unaltered; good is worth 24s. per cwt. At auction 51 bags common dusty and stony, of weak flavour, sold at 14s. 6d. to 15s. 6d. per cwt.

BALSAMS.—*Canada* steady, with a strong primary market, at 1s. 9d. to 1s. 10d. per lb. for the best. *Copaiba*, little doing. *Peruvian* quite neglected. The nearest price for good thin balsam is 4s. 6d. per lb. One or two lots were bought in at 4s. 9d. in auction. Five barrels liquid *Storax* are catalogued for sale, but were not reached to-day. Of *Tolu*, a parcel of 4 cases sold without reserve at 1s. 3d. per lb.

BROMINE without alteration. All *Bromides* unchanged at the recent quotations.

BUCHU.—The supply is far in excess of the demand, several fresh lots, including a good fresh, but rather stalky, parcel of long leaves, were offered for sale to-day. Only a few lots found buyers at 1½d. per lb. for yellow and discoloured (without reserve). Stalky round leaves bought in at 3d. per lb. A parcel of 21 bales false buchu (*Empleurum serrulatum*), imported in 1882, will again be offered to-morrow. The stuff is worth nothing as a drug.

CALABAR BEANS.—A parcel of 364 lbs. beans, catalogued as Calabar beans, but being a species of *macuna* which has been seen occasionally in our market before now, was offered "without reserve," but bought in at 9d. per lb., no bid being forthcoming.



**CALUMBA.**—The supply is abundant, and nearly the whole was bought in, only a few parcels tempting buyers at very low rates; 10s. per cwt. was paid for a small lot old and discoloured root, and 7s. for 22 bales small dark and wormy. Dark and yellowish mixed root was bought in at 15s. per cwt.

**CAMPHOR** is again dearer. Crude *Japan* has changed hands at 77s. 6d. per cwt. on the spot in fair quantities, and now there are no sellers under 80s. per cwt. *Refined* is now quoted at 1s. 1d. per lb. for bells and large tablets.

**CANNABIS INDICA.**—About 11 bales sold, partly without reserve, at 2d. per lb. for brown seedy and stalky tops. Fine green cannabis seems scarce.

**CANTHARIDES** remain quiet without much business. At the auctions, 1 cask very broken *Russian* flies sold at 4s. 6d. per lb. A new parcel good *Chinese* cantharides will be reached to-morrow. Privately, the price is nominal at 1s. 9d. to 2s. per lb.

**CARDAMOMS.**—The supply consisted of about 160 packages, presenting a fine selection, and including a considerable proportion of the better grades. There was a well-sustained competition, and values advanced from 2d. to 3d. per lb. all round, the following being the prices paid:—*Ceylon Malabar*, good to fine bold pale bleached, 2s. 8d. to 2s. 10d. per lb.; boldish yellow to plump, medium-sized pale, 2s. 2d. to 2s. 4d.; long but specky and partly split, 1s. 7d.; small yellow, 1s. 7d.; brown small and husky to brown and pale mixed medium sized, 1s. to 1s. 3d. per lb. A parcel of good yellow smooth and heavy *Mangalore* is held at 3s. 6d. per lb.; dull *Tellicherry* out at 1s. per lb. For good *Seed* 1s. 7d. per lb. is required, 1s. 6d. having been refused. Holders showed no particular anxiety to realise, and several lots were bought in at high prices. The Ceylon exports from October 1 to November 3 were 24,946 lbs., against 13,651 lbs. and 8,797 lbs. in the corresponding periods of 1886 and 1885.

**CASCARILLA.**—A parcel of 11 bales fine small silvery bark is held at 40s. per cwt. Bidding ran from 35s. to 37s. Three bales small quilly grey, rather dusty, sold at 21s. per cwt.

**CASTORUM.**—The Hudson's Bay Company's 1887 imports, which will be offered for public sale on December 14, consist of 1,144 lbs. YF, 543 lbs. MR and EM, 684 lbs. Canada, and 457 lbs. NW, &c., altogether 2,833 lbs., a rather considerable quantity. It is said that this is absolutely all that will be brought forward, nothing remaining at the other side. At to-day's auctions 105½ lbs. fine thirds sold at 29s. per lb.; 37½ lbs. ordinary ditto, 25s. 6d. to 26s. 6d.; pickings and common 19s. 6d. down to 9s. 6d. per lb.

**CINCHONA.**—For the drug sales 189 packages South American bark were catalogued, but part of this was not reached to-day. For the lots actually offered there was a very fair competition. Sixty-five serons *Crown* bark were nearly all sold, good Guayaquil at 1s. 5d.; Huanoco, thin quill silvery grey, 1s. 4d.; damaged ditto, 1s. 2d.; ordinary, 4d. to 11½d.; fine fresh Loxa, 2s. 2d. per lb.; 19 bales *Lima*, pale broken mossy quill, realised 4½d. per lb.; 76 packages genuine hard yellow flat *Calisaya*, rather small dark and papery, were mostly bought in; a few of the best sold well at 2s. 1d. per lb. The exports of cinchona from Ceylon between October 1 and November 3 were:—1887, 752,701 lbs.; 1886, 1,019,106 lbs.; 1885, 1,774,457 lbs. It is said that a good deal of the stock of twigs in Ceylon is now being used as fuel in the mill furnaces, which causes less loss of money to the planters than shipping it to London would do. No reliable information can be obtained concerning the extent of the stock held in Ceylon and the quantity of yet unharvested bark.

**CINNAMON.**—The quantity offered for sale at the quarterly auctions held on Monday was more than twice as large as that catalogued on the preceding occasion, being 2,868 bales, against 1,107 bales in September last. When it was found that holders were willing to accept reduced prices, a fairly brisk demand set in, and the greater half was disposed of: firsts, at a decline of from 1d. to 3d. per lb.; seconds, thirds, and fourths, at a reduction of ½d. to 1d. per lb. The following prices were obtained:—Good to superior firsts, 1s. 1d. to 1s. 5d.; common to fairly good ditto, 8½d. to 1s.; fine seconds, 1s.; common to good ditto, 8½d. to 11½d.; common to fine thirds, 7d. to 11d.; fourths, 6½d. to 9½d. per lb.

**CINNAMON CHIPS.**—Over 300 bags were sold by public

auction this week: quillings, 6½d. to 7½d. per lb.; common to good, 2½d. to 4½d.; and dust, at 1½d. per lb.

**CIVET.**—Holders ask higher prices than buyers are willing to concede, several horns were shown, and bought in at 10s.

**COCA LEAVES** steady but quiet. Out of a parcel of 49 bales offered at the auctions, 6 sold, good *Huanoco* leaf at 1s. 3d. per lb.

**COPPER (SULPHATE).**—The rise still continues. 20l. has been paid for first "Mint."

**CREAM OF TARTAR** lower, first white being now offered at 126l. 10s. per ton on the spot, London terms.

**CUBEES** remain scarce, and for fine genuine berries as much as 25l. 10s. per cwt. has been asked. At the auctions, 8 bags, partly damaged spurious berries, were bought in at 15l. per cwt. No offers were made.

**CUTCH.**—The market is steady, and privately RS slabs have sold at 31s. 6d., and block at 30s. 6d., per cwt.

**DRAGONSBLOOD.**—Ten cases fine deep red soft seedv lump sold at 7l. to 7l. 2s. 6d. per cwt., while 8 cases dull *Socotra* in loose woody mixed drop were bought in at 80s. per cwt. Another parcel of *Socotra* gum will be offered to-morrow.

**ERGOT OF RYE.**—Quiet, and without demand, at about 1s. 7d. per lb. for *Russian*. At the auctions 11 cases *Spanish*, old and dusty, were bought in at 1s. 10d. per lb., no bid being forthcoming. Three bags old damp wormy *Russian* ergot sold at 10½d. to 11d. per lb.

**FENNEL SEED.**—Thirty bags good East Indian sold at 15s.

**FENUGREEK SEED** unchanged. At the auctions 60 bags and a quantity of loose stony Mogadore seed bought in at 8s. per cwt., at which price good seed can be had.

**GALANGAL.**—Sixty bales dull mouldy root sold without reserve at 7s. to 7s. 3d. per cwt., a very good price indeed.

**GAMBIER** closes firm, with an advancing tendency. During the week 125 tons *Black* just landing sold at 23s.; since then 23s. 6d. has been paid on the spot, and 22s. 9d. for October and October-November.

**GENTIAN ROOT.**—Out of a parcel of 19 bales, 10 bales good bright root sold at 16s. 6d. per cwt. Some holders ask 17s. per cwt. for good quality.

**GUARANA** neglected. Two lots offered, and were both bought in at 5s. per lb. nominally, there being no buyers.

**GUM ARABIC.**—The demand for Arabic generally has been small during the last few days. In *Barbary* gums everything is very quiet, although at the same time holders are not anxious sellers. A few packages good Tripoli Amrad sold in auction at 84s. per cwt. Fine selected *Cape* gum is in good demand, but common qualities are not easy of sale. *East Indian* gums quiet since last week's auctions. In *Ghezirah* gum we do not hear of any further business. Sales of *Turkey* sorts are very small, a bale or two at a time, at previous rates. The value of *Senegal* gum is maintained, small sales of fine Galam being made at 7l. 5s. per cwt.; but the high price is much against business. At to-day's auctions several parcels gum arabic were offered, but none sold. The position of the Cairo market on November 19 was as follows:—Supplies of *Turkey* sorts and *Ghezirah* gum had been stocking for many months, but a few days ago 3 serons of the former and 19 serons of the latter were received. The owner of the lot has refused 12l. 16s. per cwt. f.o.b. Alexandria for the sorts, and 97s. per cwt., same terms, for the *Ghezirah*, and demands higher prices. No other lots are expected, and, according to news received from the interior, nothing whatever is looked forward to for a long time to come. The stock of Red Sea gums, Amrads, &c.—consisting of about 1,000 serons of different qualities—is nearly all disposed of. It was purchased by speculators at high rates—viz. 70s. to 104s. per cwt. f.o.b. Alexandria, according to quality. The stock is now very much reduced, and but a small quantity is expected for the next few months.

**GUM BENJAMIN.**—Quiet, prices if anything being slightly easier. *Siam* gum quiet, sales being confined to a case here and there; one case good bold mixed loose almonds, slightly woody, sold at 21l., and one case ordinary coarse grainy block, without reserve, sold at the low price of 6l. 5s. per



cwt. *Sumatra* offered liberally, several parcels being of exceptionally fine quality, but the demand was rather slack. Fine white almondy seconds were bought in at 117. to 117. 15s. per cwt.; good almondy seconds, brown bordered, are held at 97. (87. 15s. being refused). Ten cases good seconds, almondy centres and fair corners, sold at 87. 15s. to 87. 17s. 6d.; good thirds, pale almondy centres, but very false packed borders, sold at 67. 15s., while more is obtainable at that price. Two cases ordinary drossy third *Penang* sold at 57. 10s., without reserve. Two or three parcels fair *Palem-bang* gum were offered, but remained unsold.

**GUM ELEMI** quiet. Seventeen cases rather dirty whitish *Manila* bought in at 32s. per cwt.; less would probably be taken. Seven cases very ordinary hard dark block, without flavour, per *Marseilles* steamer, were bought in without mention of price, as, though catalogued "without reserve," no one would buy.

**GUM EUPHORBII**.—Ten serons *Morocco* gum, about 2 cwt. each, were offered in two lots, one of which the broker claimed to have sold at 50s. per cwt. The second lot was bought in at the extravagant price of 80s. per cwt. The gum consists about one half of wood and sand.

**GUM GUAIACUM**.—9d. per lb. is asked for 3 cases fairly resinous block, but the article remains neglected.

**GUM KINO**.—Without alteration, but only a very limited business doing. Two cases rather dull coloured small broken grain sold at 42s. 6d. per cwt.

**GUM MYRRH**.—Not in much demand. Three bags sorts, rather dusty and mixed with bdellium, sold at 90s. per cwt., and 10 bales very common *Bombay* pickings at 5s. per cwt.

**HONEY**.—Quiet and without much business. Of 25 kegs good candied orange *Jamaica* five sold at 26s. 6d. per cwt. The remainder is held at 27s. per cwt. Four cases ordinary orange nondescript sold at 20s. par without reserve. Twenty-one casks old dull yellow *Californian* bought in (there being no bid) at 30s. per cwt.

**IODINE** remains unaltered at 9d. per oz., and *Iodide of potassium* at 11s. 3d. per lb.

**IPECACUANHA** dull of sale, and quite 3d. per lb. lower for those lots which were disposed of to-day—viz. about 8 out of 57 packages catalogued. Good selected root was bought in at 5s. 6d. per lb. nominally, the broker promising to submit an offer of 5s. 1d. per lb.; fair to good bright annulated but more or less damaged root brought 4s. 2d. to 4s. 5d.; second-class mouldy and thin, 3s. 11d.; dull damaged and wiry, without reserve, 3s. 4d. to 4s. per lb.

**JALAP**.—Twenty-four packages *Vera Cruz*, of rather mixed character and old import, sold, partly without reserve, at 6d. to 6½d. per lb.

**KOLA NUTS**.—One barrel fairly bright *Grenada* bought in at 9d. per lb., 6½d. being suggested as the price.

**MERCURIALS**.—The excited state of the quicksilver market renders firm quotations impossible, but on the basis of 107. for mercury the following rates are quoted:—*Calomel*, 3s. 7d.; *corrosive sublimate*, 2s. 11d.; *red and white precipitate*, 3s. 9d.; *mercurial ointment*, 2s. 3d.; *blue pill*, 2s. 4d.; *English vermilion*, 3s. per lb.—an advance of 6d. per lb.

**MORPHIA**.—No business of any consequence is reported.

**MUSK**.—There was no fine *Tonquin* musk offering to-day, and we have received none since our last report; but, judging from the prices realised by the lots sold, a fresh advance would have taken place if any fine musk had been placed in sale. *Tonquin*, first pile, an exceedingly damp and rather unsightly parcel, medium to bold very broken pods, extremely thin blue skin, without underskin, sold at 95s. per oz., bidding commencing at 85s. per oz. For third pile, false, damp, and very skinny, 59s. was refused, 60s. being the price. Two tins fine juicy *China cabardine* bought in at 35s. per oz.; several bottles ordinary *grain* were bought in at from 30s. to 45s. per oz.; one sold at 25s. per oz.

**NUX VOMICA**.—Eight bales ordinary *Bombay* sold at 10s.

**OIL (CASTOR)** without change. Fine *Italian*, 4d. to 4½d. per lb. *East Indian*, fine *Calcutta* bought in at 4½d. per lb., yellow *Coconada* held at 2½d. per lb.

**OIL (COD LIVER)**.—Business is reported to have been pretty brisk since last week, and a fair trade is doing at

prices which were not readily conceded a short time ago; 3s. 9d. to 4s. 3d. per gallon for finest non-congealable, 3s. 4d. to 3s. 8d. for summer oil.

**OILS (ESSENTIAL)**.—There has been no material alteration in the prices since last week. *Star anise* on the spot firmer, 7s. 6d. per lb. being asked. *Cassia* 2s. 7d. to 2s. 7½d. per lb. without much business. In sale 2 cases fair *Cinnamon* were offered at 1s., which is the limit. Fine oil is worth a good deal more. None has been shipped from Ceylon for a long time. *Cinnamon leaf* 1½d. per oz., quiet. *Citronella* without much business at 1½d. per oz. for native brands. Ceylon shipments October 1 to November 3, 1887, 910,008 oz.; 1886, 313,632 oz.; 1885, 582,160 oz. *Otto of rose* unaltered, at 20s. 6d. for Ihmsen's brand, f.o.b. Constantinople. Two cases good *Patchouly* at auction bought in at 2s. 6d. per oz. *Peppermint*, American (HGH), sold at 12s. per lb. for forward delivery; spot firm at 12s. 6d.; at auction 20 cases LBH in tin sold, without reserve, at 7s. to 9s. per lb., rather cheaply.

**OPIMUM**.—Our market remains very quiet. At *Smyrna*, on November 18, the situation was virtually unchanged. The weather in the growing districts continued favourable for the winter sowings. The arrivals were 722 cases against 3,573 at the corresponding date of 1886.

**ORRIS ROOT**.—Very much higher prices are asked for Italian root. It is now beyond all doubt that the crop is an extremely small one. For fine *Florentine* root as high a price as 50s. to 56s. per cwt. is even named.

**QUICKSILVER** has been the object of wild speculation this week. The importers are not quoting any price at present, and they have not, so far, suggested more than 87., but in the second-hand there has been quite a lively business done, advancing by leaps and bounds from 77. 14s. last week to 107. 10s., which is reported to have been paid to-day, although that price has apparently not quite been maintained, for we understand that business was afterwards done at 107. These prices are the highest since the year 1876, but there appears to be very little reason for so extraordinary a rise, and it may be taken that the speculation fever which has attacked the metal market has something to do with the "boom." We have pointed out in these columns a short time ago that the tendency was in favour of a gradual and steady rise.

**QUININE**.—The movement started in America (see our New York correspondent's letter) has kept the ball rolling on this market, and enormous quantities of quinine (nearly all German, in bulk, of the B. & S. and Brunswick brands) have changed hands since last week. It is said that altogether over 250,000 oz. have been done this week. The price for German in bulk, which stood at 1s. 7d. at the close of our last report, is now 2s. per oz., which was paid to-day. The principal operators on this market have been two houses (one bearing an English, the other a German name) connected with the American trade. The English makers are believed not to be lending their support to the movement, but it is generally thought that they will be drawn into it if it should spread. The position of the cinchona market and previous experiences of similar booms encourage the view that the speculation may very easily be overdone. *Howard's* brand is still quoted at 2s. 3d. per oz.; *Pelletier's* is now the same price (which has been paid), and *Whiffen's* has sold at 2s. According to a New York firm of dealers, the cost of producing sulphate of quinine from the bark in Germany was formerly estimated at 20 marks per kilo. (about 7d. per oz.), but improvements in the process of manufacture have now brought down the cost, it is estimated, to 5d. per oz., including the commission for buying bark, shipping charges, and freight to factory (probably from London or Amsterdam), actual cost of manufacturing, packing, commission for selling the product, interest on the plant, and wear and tear of the factory.

**RHUBARB**.—The common sorts, which form the bulk of the stock, are quite neglected, and saleable only by pressing them on the market. At the auctions a pretty extensive supply was mostly bought in. A few lots sold, partly "without reserve." *Shensi*, small to medium flat, rather spongy, orange coat, partly pink fracture, 1s. 2d.; ordinary woody grey fracture, 9½d.; dull grey, small to medium, wormy, 4d. to 5d.; for small to bold, round, pale coated, half grey fractured root, 1s. 6½d. was refused. *Canton*, medium to bold, half dark fracture, dull coat, flat, sold at 1s. 1d.



Seventeen cases flat, new *high dried*, fair colour, mixed sizes were bought in at 10½*d.* per lb.

**SAFFRON.**—The firmer tone which we reported last week has made further progress, and the article closes at 50*s.* to 54*s.* per lb. for fine to extra Valencia. In France the price of Gatinais saffron is advancing, but the position of this variety, as we have explained before, no longer influences the article as a whole.

**SARSAPARILLA.**—*Jamaica* has advanced about 3*d.* per lb.; on the other hand, *Honduras* shows a weaker tendency. Of the latter variety, 5 serons "Crown HM" sold at 1*s.* per lb., while 6½*d.* was refused for ordinary brands, damaged root. Eight bales grey *Mexican* partly damaged, in bundles, rather woody but without chumps sold well at 7*d.* per lb.; good grey-bearded *Jamaica* 2*s.* 3*d.* to 2*s.* 4*d.*; damaged, 1*d.* less.

**SENEGA** firm, and held for higher rates. At the sales 1*s.* 11*d.* per lb. was refused for 2 bales dull chumpy root, for which 2*s.* 1*d.* is named as the price. Another lot of 4 bales, brighter and containing few chumps, is said to be limited at 2*s.* 6*d.* per lb.

**SENNA.**—The selection was a rather considerable one, but a large part was not reached to-day. The bulk of the lots are of medium and inferior quality, and these sold at a decline of ½*d.* to ¾*d.* per lb. Only a few good lots were offered. *Tinnevely* good to very good bold green leaf, 7*d.* to 8½*d.*; good medium greenish, 5½*d.* to 6½*d.*; yellowish to fair medium greenish, 3½*d.* to 5*d.*; ordinary flimsy small, more or less stalky and discoloured, 1½*d.* to 2½*d.*; pods, 1½*d.* per lb. The entire stock of *Alexandrian* senna at Cairo, numbering about 300 bales, has now been sold at very high prices, considering the inferior quality. Tranquillity not having been restored yet in the localities where the leaf is gathered, and the means of conveyance being few and uncertain, none but the smallest supplies can be expected to arrive for a long period.

**SHELLAC.**—At the auctions 612 chests were offered and mostly sold at irregular, but on the whole slightly lower rates for *second orange*, and rather firmer for *button*. The following prices were paid:—*Second orange*, MM in double-triangle, 46*s.* 6*d.* to 47*s.*; TN in diamond, 46*s.* 6*d.* to 47*s.* 6*d.*; ditto, out of condition, 45*s.* 6*d.*; V in heart, 46*s.* to 47*s.*; GN in diamond, 46*s.* to 46*s.* 6*d.*; DAC in triangle over TN, unworked livery 44*s.* 6*d.* to 45*s.* *Button* lac, fine second, 59*s.*; third, 43*s.* to 44*s.* After the sales it became evident that a considerable inquiry existed, and in the course of Wednesday some *second orange* changed hands at 2*s.* 6*d.* advance. To-day, however, a wild speculation set in, and enormous quantities (estimated at 30,000 chests) changed hands at about 8*s.* to 10*s.* advance. The last prices at which business is reported are: *Second orange* TN spot, 58*s.*; ditto, January-March delivery, 60*s.*; November-February shipment, 57*s.* (c.i.f. terms); A C *Garnet*, spot, 50*s.*; ordinary first *Button*, 70*s.* The American market is reported buoyant with speculative purchases. Calcutta reports, dated November 8, mention a strong and advancing market with considerable sales. It becomes daily clearer that the sticklac crop is a very short one. During the month of November our stock decreased to 68,500 chests, the landings being 1,490 and the deliveries 3,004.

**SPICES.**—*Arrowroot*, unchanged. St. Vincent in barrels, 1½*d.*; tins good common to good, 2*d.* to 3½*d.* A fair business is reported. *Cassia lignea*, quiet with sales at 22*s.* 6*d.* to 23*s.* for old import (1880). *Cloves*, ½*d.* lower, holders showing anxiety to realise. At the auctions Zanzibar sold at 10*d.* to 10½*d.* for fair to good; Penang middling, 11½*d.* to 11¾*d.* per lb. *Clove stems*, firmer at 2½*d.* to 2¾*d.* *Cochin Ginger*, lower, rough ends 21*s.* 6*d.* to 22*s.*; wormy medium, 24*s.* to 28*s.*; mouldy, part cut, 30*s.* 6*d.* to 31*s.* per cwt. *Maee*, easier, fair red Penang, 2*s.* 6*d.* to 2*s.* 7*d.* *Nutmegs* 1*d.* lower. *Pepper* ½*d.* easier for both varieties, with sales of damaged grey Singapore at 7½*d.* to 7¾*d.*; white Penang, dull to fairly good, 9½*d.* to 9¾*d.*; brown Singapore, 11½*d.* to 12*d.* per lb. *Pimento*, slightly lower, ordinary to good, 2½*d.* to 2¾*d.*

**SQUILLS** dearer. Several lots were offered and some sold, at 4*d.* to 4½*d.* for good pale dry, 3½*d.* for pale slightly damaged; fair, 2½*d.* *Palish* but damp squills held at 3*d.*

**TARTAR EMETIC.**—A German chemical works have, it is said, taken up the manufacture of a substitute for tartar

emetic, for use in dye and printing works for cotton goods. Previous attempts to produce a substitute containing a high percentage of antimony, and yet easily soluble in cold water, have all been failures. The new substance, which has been named antimony salt, is a crystalline double salt of fluoride of antimony and sulphate of antimony, containing 47 per cent. of oxide of antimony, and is easily soluble in cold water.

**TONQUIN BEANS** quiet. Eight packages small black *Paré* were bought in at 1*s.* 6*d.* per lb. Two cases fine frosted *Angostura* beans, for which 7*s.* was suggested, were bought in at 8*s.* 6*d.* per lb.

**TURMERIC** dull at the auctions, but closing dearer. In sale hard but rough *Madras* finger sold at 8*s.*; afterwards 9*s.* was paid privately, and 10*s.* 9*d.* to 11*s.* for Bengal.

**VANILLA.**—At the auctions to-day 367 tins were mostly sold at irregular rates, the lower qualities about 2*s.* per lb. cheaper. 7½ to 8 in. sold at 23*s.*, 6½ to 8 in. fine crystallised at 17*s.* to 21*s.*, 5½ to 7½ in. 12*s.* 6*d.* to 18*s.*, 5 to 6½ in. 10*s.* to 13*s.* ordinary dry and foxy from 11*s.* down to 5*s.* per lb. It is now almost certain, Port Louis advices say, that the Mauritius vanilla crop will be slightly in excess of last season's. It is generally estimated at 67,000 lbs.

**WAX (BEES')** firm, *Jamaica* selling at slightly higher rates. Of about 90 packages of that variety a goodly proportion sold; good bright orange at 5*l.* 12*s.* 6*d.*, red at 5*l.* 10*s.*, orange and grey at 5*l.* 5*s.* to 5*l.* 7*s.* 6*d.*; dark and brown mixed at 5*l.* per cwt. *Mogadore* is held at 85*s.*; fair *Madagascar* bought in at 5*l.* per cwt.

**WAX (CARNAUBA).**—Twenty-seven bags fine yellow wax were bought in at 60*s.* per cwt.

## THE AMERICAN MARKETS.

NEW YORK, November 18.

SINCE the beginning of the present month our drug market has been rather dull, although there is still a good consumptive demand. The weakness and constantly declining prices of quinine and opium, the break on the speculation in ergot, and the "bear" operations in H. G. Hotchkiss oil peppermint are the prominent features of the market. The export demand has not improved.

The prices sterling (in parentheses) are what the different articles would cost delivered in London, all market allowances, discounts, &c., being taken into account. Importers can therefore see at a glance the course of this market compared with their own.

**ALOE (CURAÇAO).**—Further arrivals took place this week, but no buyers can be found at any price. About 1,000 boxes are in the importer's hands unsold, and more reported ready for shipment.

**BALSAMS.**—Considerable arrivals of Maranham *Copaiba* are reported. Some Maracaibo which arrived to-day sold for the high price of 39*c.* (1*s.* 9*d.*). As this balsam was afterwards offered by dealers at 38*c.*, it is not quite clear where the profit can be. *Tolu* continues to arrive, and has fallen to 30*c.* (1*s.* 4*d.*). The big drop in the price of Chicle has no doubt helped the decline.

**BORAX.**—Some sort of a combination being arranged amongst the Californian purchasers, the price has been advanced to 7*c.* (35*s.*) for city refined.

**CAMPHOR (REFINED)** has advanced slightly, now that most of the dealers have made their contracts for next year.

**ERGOT OF RYE.**—The speculation has collapsed, and now there are sellers of *Spanish* at 35*c.* (1*s.* 7*d.*). Consumers are waiting developments.

**OILS (ESSENTIAL).**—The distillers of *Sassafras* oil are not shipping any to the market, and it is surmised they are not in a position to start working, for the low prices of the early part of this year severely embarrassed, and drove a great number out of the business. The market is nominally 45*c.* (2*s.* 1*d.*), but it is doubtful if any quantity can be had at that figure. *Peppermint.*—The news that H. G. Hotchkiss brand was selling at 12*s.* in London had a depressing effect



on this market, and soon it was discovered that nobody was willing to go on paying \$2.50 for that oil. Purchasing in the country stopped, and although the growers still hold out for \$2.00, it is now thought some of them may weaken as the end of the year approaches. Very little is doing in Michigan. The growers there have formed an association for mutual information and protection. They are all holding for \$2.00.

**QUININE.**—The article in *THE CHEMIST AND DRUGGIST* of October 22, "Does Cinchona-growing Still Pay?" has given rise to a considerable number of circulars from importers and dealers, quoting extracts to show that bottom had at last been reached, and that sulphate of quinine at present prices must prove a safe investment. This has led to considerable speculation during the last few days, but no advance of importance has been established. Good *German* brands which were selling at 29c. (1s. 3½d., 5 per cent.) are to-day 30c., and the agent of the B. & S. brand raised his official price from 32c. to 34c. (1s. 4½d. to 1s. 5¾d., 5 per cent.).

**SARSAPARILLA.**—There is no inquiry for *Mexican*, and no demand. The stock here is still over 800 bales. *Honduras* is greatly neglected, and is tending lower.

**SENEGA.**—A considerable quantity has been taken for export, and with the exception of one holder, who says he has not half enough for his regular orders, there is no stock on the market. Supplies in the West are also short, for 45c. has been paid, or equal to 48c. (2s. 3d.) here. The jobbing price is 50c. (2s. 4d.), with a higher tendency.

#### AMERICAN CABLEGRAM.

NEW YORK, November 30.

**ALOES.**—Large quantities of coarse dark *Curaçao* aloes in boxes are now offering on our market.

**OIL OF PEPPERMINT.**—Holders here are evidently afraid that prices will take a fresh tumble. They are pressing their stock on the market.

**QUININE.**—Great excitement has to-day prevailed on our market. Prices have considerably advanced in consequence of a demand from Europe, and 42c. (equal to 1s. 8¾d. per oz net in New York) has been paid for German quinine in bulk

#### THE DUTCH MARKET.

AMSTERDAM, November 30.

**CINCHONA.**—The public auction here on December 8 will consist of 253 cases *succirubra* quills; 162 bales 74 cases *succirubra* broken quills, chips, and shavings; 59 bales *succirubra* root; 39 cases *calisaya* Schuhkraft quills; 21 bales *calisaya* Schuhkraft broken quills and chips; 14 bales *calisaya* *anglica* root; 3 bales 104 cases *calisaya* Ledgeriana quills; 1,443 bales 102 cases *calisaya* Ledgeriana broken quills, chips, and shavings; 538 bales 3 cases *calisaya* Ledgeriana root; 14 cases *officinalis* quills; 54 bales *officinalis* broken quills and chips; 10 bales *officinalis* root—total, 2,305 bales 589 cases.

**COCOA BUTTER.**—On December 6, 45 tons of Van Houten's brand will be offered by auction.

**LION BRAND SEALING-WAX.**—We have examined this brand of sealing-wax, which is now manufactured by Messrs. George Stewart & Co., of Edinburgh. In colour, freedom from grit, and hardness the wax is all that could be desired; several of the qualities, such as the "Treasury," "Bank of England," &c., are of high melting point, and stand extreme heat, but all the letter wax and dispensing wax are suitable for hot climates, and they afford clear impressions of the die. They also manufacture parcel waxes of two kinds (round and square), with a range of qualities in each. The square variety ("Stronghold") in brown is specially suited for druggists' parcels, being possessed of strong adhesive properties. The London warehouse of the firm is at 3 Dyer's Buildings, Holborn, E.C.

#### BRITISH AND FOREIGN CONSULS' REPORTS.

##### MEXICO.

*Probable Decline of Vera Cruz.* It is believed that a syndicate of American capitalists is about to establish in the Brazos de Santiago (near the frontier of Mexico) a port with bonded warehouses, for the express purpose of supplying Mexico. If this should be true it will be very serious for Vera Cruz, which has no bonded warehouses, and where the import duties are so high (equal to from 100 to 200 per cent. *ad val.*) that local merchants cannot afford to hold stocks of any importance, for their interest runs not only on the cost of their goods, but, of course, on the import duties also. This being so, they order their goods as they want them from New York or Europe, and they and their customers have consequently to wait a considerable time before they get them. And if customers can buy goods out of bond just across the frontier, and forward them quickly by the cheap northern railways, they will at once leave off buying via Vera Cruz from New York or Europe goods which cannot come quickly, nor, in view of the higher freights on the Vera Cruz-Mexico line, be delivered cheaply. The lowest freights for imported goods of the Mexican (English) Railway Company are at least 50 per cent. too high; and, unless the company proceed without delay to make a general and sweeping reduction of its rates, the great bulk of the trade of Vera Cruz will certainly be diverted to the north, and be divided between the Mexico-El Paso line and its Tampico branch, to the advantage of the United States and disadvantage of all other countries, especially England, France, and Germany; although Tampico, appropriating a certain share of Vera Cruz trade, will to that extent discount the general loss of European countries by the extinction of Vera Cruz as a commercial centre.

*Drug Exports.* The exports of drugs and spices from Mexico during the financial years 1884-85 and 1885-86 are given as follows, in dollars:—

	1884-85	1885-86
	Value \$	Value \$
Annatto .. .. .	73,772.50	71,870.20
Drugs .. .. .	14,327.75	773.17
Dyewood extracts .. .. .	26,704.00	—
Honey .. .. .	123,547.70	59,455.84
Indigo .. .. .	30,156.25	119,086.50
Jalap .. .. .	36,726.00	24,582.00
Resin .. .. .	66,809.68	158,767.56
Sarsaparilla .. .. .	53,822.42	119,837.23
Spanish pepper .. .. .	3,977.00	10,040.07
Spices .. .. .	463.09	3,064.79
Vanilla .. .. .	471,611.52	463,395.25

*Tampico Drug Exports.* The exports from Tampico in 1886 were worth 955,400 pesos (dollars), against 872,420 pesos the year before. They include:—

	Shipped to			
	Hamburg	Havre	Liverpool	New York
Sarsaparilla Bales	667	971	120	2,304
" Value pesos	12,160	16,930	2,350	44,560
" Casks	—	—	—	1,151
Honey Value pesos	—	—	—	20,930
Dyewood .. Quintals	9,550	1,120	5,300	122,283
" Value pesos	7,300	870	4,100	94,470

*Petroleum Springs in Vera Cruz.* In the State of Vera Cruz petroleum springs are found in a line, 150 miles long, running through the eastern cantons, at a level of some few hundred feet to about 2,500 feet above the sea. The petroleum line is from 5 to 15 miles from the coast. The only serious attempt to solve the question whether Vera Cruz petroleum wells will pay is now being made by an American company, who are sinking three wells about 35 miles west of Tuxpan. One of the wells is already about 300 feet deep, and the crude oil has been tested at New Orleans with very satisfactory results. The company intends to refine the oil itself, and is now engaged in transporting the necessary machinery to the wells over the country roads.





### Memoranda for Correspondents.

*Always send your proper name and address: we do not publish them unless you wish.*

*Write on one side of the paper only; write early; and devote a separate sheet of paper to each query if you ask more than one, or if you are writing about other matters at the same time.*

*If you send us newspapers, please mark what you wish us to read.*

*Ask us anything of pharmaceutical interest: we shall do our best to reply.*

*Before writing for formulæ consult the last volume, if you have it.*

*Letters, queries, &c., not noticed in this issue will, if possible, be attended to next week.*

### Solubility of Saccharin.

SIR,—Your correspondent "Heder," in his criticism of my use of saccharin in cod-liver oil emulsion, has not quite done me justice. He seems to have overlooked some remarks following immediately on my formulæ, viz.: "The method found most convenient for using saccharin is a 10-per-cent. solution, made by adding bicarbonate of sodium till effervescence ceases; 20 grains of saccharin take 8 grains of the soda salt." After this I scarcely need say that the above solution was used in all my experiments. May I add that Martindale's Elixir contains an unnecessary excess of bicarbonate of sodium?

I am, sir, yours truly,

A. W. GERRARD.

North London or University College Hospital,  
London, W.C., Nov. 29.

### The Irish Pharmacy Act.

SIR,—The Council are now "between the hammer and the anvil," and it will be interesting to see the fruit when their nut is cracked. Fortunately the "cloture" put upon the minority of the Council does not apply to those interested who are not on the Council.

As a pharmaceutical chemist, I should certainly have stood by the Council in standing by their Act had they continued to administer it in the spirit of the framers or according to the letter. They now assume a new face, and I ask licentiates and would-be registered druggists, with the assistants and apprentices of both, to look well at it.

Is it to be supposed they are going in for an Act solely to license gentlemen who have been violating their Act during a period of twelve years, and to legalise what is illegal? This is only the easily-recognised red herring. If that was their object, I reckon, as business men, they would say, Promote your own Bill and we will assist you, but we will not undertake the expense or responsibility.

I would say to the assistants and apprentices of both parties, Look to yourselves, as your interests are most concerned; you are not considered in the new departure, the objects of which are to increase the impediments in your way of mounting the ladder of pharmacy or druggistry, as well as to legalise present illegalities. In fact, the proposition (I hesitate to use the word "conspiracy") may be put thus:—"In our anxiety to promote our monopoly we have overstepped our limits, and find ourselves in a fix; if you help us we will acknowledge your rights, and get them expressly sanctioned, but you must make no claim for those who now occupy the position you did twelve years ago. It must be recognised that they have no claim; they may turn to the store men or grocers, or perhaps enlist, but they must not be allowed to claim any right to deal in poisons (or compound prescriptions) unless they put in a preliminary period of four years as cheap assistants for the benefit of some of us. Of course, you registered druggists could not give them the qualification we require. We have too many neighbours already, and they won't go to the country towns, where they do not see a prospect of making fortunes or of rising to eminence." Before

the would-be "registered druggists" join hands, I would ask them to consider that, according to the preamble of "our Act," it was the great deficiency "which exists throughout Ireland of establishments and shops for the sale of medicines (not poisons) and compounding of prescriptions" which rendered it "expedient that provision should be made for . . . the registration of such persons as may be found, *on examination*, to possess a *competent practical knowledge* of pharmaceutical and general chemistry and other branches of useful knowledge, as fit persons to keep open shop for the dispensing and compounding of prescriptions of duly qualified medical practitioners." The convenience of the public as to two things only is sought—the "sale of medicines" and "dispensing and compounding of prescriptions." But there is not one word of suppressing the trade of "chemists and druggists," which then existed, and helped to relieve the public of the very disadvantage under which it laboured. Besides this, it should be borne in mind by the "chemists and druggists" and their representatives—first, that the Council did not "determine" by the resolution which the Act required of them at their first meeting. Instead, they resolved "that for the present there shall be but one qualification." But they have no power in the Act for such a provision, and after their first meeting their power of passing it was forfeited. Secondly, by section 31, "Nothing in the Act contained shall extend to or interfere with the business of chemists or druggists who are practising as such, . . . save and except the provisions against the compounding of poisons or medical prescriptions, and against the preparing of any medicines of the B.P., except according to the formularies of the said Pharmacopœia." I think it will be admitted that to interfere with the value of a business or its right of disposal, by sale or otherwise, by limiting its market, and the power of carrying it on and continuing it, by means of apprenticeship, is a serious interference with such business, and that in face of such reservation it would be a difficult matter to put the Act in force against the legitimate successors of the "1875 chemists and druggists." But the absence of the specific resolution called for under the Act leaves the trade as it stood, with all its rights continuing; for thereby all the clauses of the Act dealing with the title of "chemist and druggist," and the second grade of dispensers, who were to have assumed that title, have, as it were, dropped out of the Act as though they had never been passed.

The question of whether there is room for the chemist and druggist is beside the question. They exist, and the fittest will survive, and there is no doubt, if the pharmaceutical chemist is the man he ought to be, he will do better all that the registered druggist wants to do. The difficulty is with the Council, which insists on a qualification higher than is necessary for the business; for, after all, the public require business men and not scientists, and scientists want professional fees and not business to live by.

But, "Who is to pay the piper?" and is the registered druggist to be eligible to be an "associate," with the privileges assigned to an associate in section 18 of the present Act?

Yours,

ANOTHER DUBLIN CHEMIST. (206/3.)

### ["More Legal Proceedings Wanted."]

SIR,—Many members of the trade will endorse the remarks of "Ecosse" in last week's issue. Personally, I do not think we ought to expect much from the Pharmaceutical Society. They will tell you they have the matter under their gravest consideration, and, like the old lady's parrot, though they do not do or say much for the benefit of the trade, they are second only to his Satanic majesty for thinking.

They seem, indeed, very reticent as to any information respecting what most of us still regard as illegal combinations to sell "a single article at wholesale price."

For instance, in the town in which I reside such a "store" has been provided, and I, believing that the "company" (?) had not even a qualified pharmacist as manager, wrote to the secretary to ask if Mr. —'s name was on the register of the Pharmaceutical Society. In reply, the secretary, whilst assuring me that the matter of these so-called drug stores had the deepest consideration of the Society, quietly shelved the question to which I have alluded, although I repeated it in a subsequent letter.



Some years ago when the interests of the trade were threatened by the Apothecaries' Company the trade united, and, assisted by influential men, both in the wholesale and in the retail, did good service in the cause. Have we become so disunited and so feeble that nothing can be done to face this latest monster of illegitimate birth? Has the *vis viva* entirely left us, and are we to become an easy prey to the vultures now in our midst? I believe there are yet enough of us, if we were to show a united front, to carry the war into the enemy's camp and successfully put them to rout; or, failing that, to provide in each town, by combination, dispensing establishments on a sufficiently large scale to meet the demands of each place, which should be worked by ourselves, and where we could give to the public the assurance of having their medicines prepared by duly-qualified pharmacists.

I remain, sir, yours faithfully,  
HIRUDO. (46/204.)

#### Old Solutions of Morphine.

SIR,—It is curious that "the presence of apomorphine in old solutions of morphine" should still be believed in. No real evidence has ever been led to establish that belief. If your correspondent, or anyone who suspects that he has such a solution, would send me a small sample of the same, I should be very glad to test it, and report the result.

My friend, Dr. Ralph Stockman, informs me that there is nothing surprising in sickness occasionally following the administration of morphine to the human subject, as in dogs vomiting frequently results from the same treatment. In short, the argument for the formation of apomorphine in old solutions of morphine breaks down both on the chemical and physiological sides. Yours very truly, D. B. DOTT.

University, Edinburgh, November 29.

#### Pharmacy Practice in the Channel Islands.

In reply to "Alpha" (196/25), Mr. H. Cumber, jun., of Guernsey, informs us that in one of the Channel Islands—Guernsey—the Pharmacy Act is practically in force. Some years ago the Royal Court enacted that in future no one shall be allowed to "dispense medicine" who does not possess a certificate of the Pharmaceutical Society of Great Britain or a French diploma. Both medical men and chemists have to obtain permission of the Royal Court before they can legally exercise their profession in this island. In Jersey no restriction exists.

Arthur Sketehley, Jun., also informs us that the Pharmacy Act is, and has been since 1879, in full force at Guernsey. Jersey and Alderney are in no way whatever restricted by the Act.

#### A Personal Question.

SIR,—My attention has been recently drawn to a company (registered April 16 last) and formed to carry on the business of chemists and druggists, the capital of which is 1,800/., in 180 shares of 10/ each. The holder of 174 of these shares is not a chemist and druggist, and the remaining six shares are held by six persons, one of whom is registered at Somerset House as Js. H. Read, chemist, 818 Holloway Road. Can you inform me whether this person is identical with the J. H. Read, of 818 Holloway Road, whose name was published in your issue of November 19, page 644, as one of the five original councillors of the new company (intituled the Incorporated Society of Chemists and Druggists, Limited, registered November 1) in process of formation for the protection of the interests of chemists and druggists?

Yours obediently,

ONE OF THE SUBSCRIBERS. (206/43.)

#### A Personal Matter.

SIR,—In your issue of November 19 you have a paragraph concerning Messrs. Cooper & Nephews and myself, which conveys the impression that I made unfounded statements behind persons' backs. This is most unfair to me, and I want

you to give me the opportunity of denying it. What I stated was said upon oath, in reply to the solicitor and counsel of Messrs. Cooper & Nephews, but whom you state were not represented. Mr. Chamberlayne was Cooper's solicitor in all the actions for libel and slander, also in the action "Cooper v. McDougall," also in the action now pending—"Cooper v. Little." The only creditor he represented at my bankruptcy was Mr. Cooper, upon whose behalf he presented a petition against me for their costs in the libel action, which he had promised should never be asked for if I would stay proceedings, which I did. This is what you term a creditor for a large amount. Mr. Houghton is Mr. Cooper's counsel in the same matter. The words put into Mr. Houghton's mouth have been denied over and over again, and yet no atom of evidence is brought to support them. The allegations of fraud were carefully avoided before that experienced Chancery Judge, Mr. Justice Kay, before whom the case has been both in chambers and court for three or four years.

I remain, sir, yours obediently,

S. W. BRADBURY.

New Oxford Street, London, W.C., November 30.

#### Drug Stores and Pharmacies.

SIR,—Co-operative drug stores would receive a check if the Pharmaceutical Society could legalise a clause making it a condition that each qualified man on receiving his certificate from the Society should sign a declaration that he will in no way whatever be connected with co-operative stores, and agreeing to forfeit his qualification if he break this contract.

CINNAMON. (55/205.)

#### Printing for Chemists.

SIR,—In these days of competition it behoves chemists in their own interests to "put up," as far as possible, and sell their own preparations. To introduce these they must be well advertised by means of counter bills, &c., to print a large variety of which costs a great deal. I should like to hear from some of your readers what they consider the best "graph" or "style" for this purpose, together with cost of same, and number of copies that can be taken from one impression.

Yours truly,

NOSTRUM. (203/2.)

#### LEGAL QUERIES.

42/204. W. H.—It is not illegal for an unqualified person to use the term "drug store" for his shop.

20/204. D. D. C.—We have not got your previous question; consequently your inquiry, in its abbreviated form, is not quite intelligible to us.

40/206. *Uridis*.—The Board do not regard the screwing of pills taken from a duly-stamped packet as a repackaging, and we do not think they would object to the enclosing of pills in a plain pill-box as infringing their conditions; but you might not put up the pennyworths of patent medicines as if they were original packages.

70/205. J. B.—The graph patent was granted on November 13, 1878, and is still in force. The patent claims the use of the gelatine and glycerine mass with aniline inks for the purpose of copying letters, drawings, and documents of all kinds. The English patent was granted to John Guy Wilson, on behalf of two Bohemian inventors, and is now, we understand, held by the Copying Apparatus Company. You have not a right to make or sell imitations of the article.

73/204. *Perplexed* states the following case:—"Fourteen years ago I began business, and to a certain house I sent an order, and in due course had such executed, but no invoice was rendered against me. I made several attempts towards procuring this—such as writing and calling upon the house—but all to no purpose. Thus matters stood. Ten years after I sold out, and began business in another part of the



country, and then the long-looked for invoice is sent me, with a demand for payment in full. This I objected to do, and nothing further is heard till now, when again I am asked for payment in full. The query is, Am I entitled to pay; and, if so, what? It must be remembered I have now no means of checking the said invoice." [In England, unless your letter of four years ago contained an acknowledgment of your indebtedness, the claim against you would have become barred by the Statute of Limitations, which could have been pleaded as a bar to any action against you. In Scotland the claim is now barred by the triennial prescription; but it is liable to be renewed and your prescriptive defence displaced by what is known as the "oath of reference": that is to say, the other party may obtain leave to refer the matter to your answer on oath, and must stand or fall by such answer. If you acknowledge the debt, this would have the same effect as an acknowledgment in writing in England.]

*Mr. Mays* (South Shields).—You are certainly not infringing anybody's rights by your label; but you may have rendered yourself liable to an action by collateral circumstances.

#### DISPENSING NOTES.

[The opinion of practical readers is invited on subjects discussed under this heading.]

##### Creasote in Pills.

SIR,—How can the following be satisfactorily dispensed—

Pil. rhei comp.	..	..	..	..	gr. iij.
Creasoti	..	..	..	..	miss.
Camphor.	..	..	..	..	gr. ss.
Ft. pil. ij.					

ALPHA. (195/25.)

[Mix the creasote with 2 grains of powdered curd soap, add the camphor and pil. rhei co. in powder, and mass with treacle.]

##### A Gallic Acid Mixture.

SIR,—In dispensing the under-mentioned prescription a reaction seems to occur between the gallic acid and the citrate of potash when rubbed together with the aqua menth. pip. in a mortar. What is the nature of the decomposition?

Acid. gallic.	..	..	..	..	3iiss.
Potass. citratis	..	..	..	..	3iiss.
Glycerin.	..	..	..	..	3i.
Syr. zingib.	..	..	..	..	3j.
Aque menth. pip. ad	..	..	..	..	3viij.

Yours truly,  
LEWIS OUGH.

Plymouth, November 21.

[When the acid and citrate are rubbed together or shaken with a few drachms of the water, the mixture becomes solid in a few seconds. The solid substance appears to possess the properties of potassium gallate, but it is associated with citrate of potash, and may therefore be regarded as a compound of the two bodies. This explanation is supported by the fact that citrate of potash has the property of rendering gallic acid more soluble in water.]

##### A Supersaturated Mixture.

SIR,—How can the following be made so that the sulphate of soda will remain in solution?—

Sodæ sulphatis	..	..	..	..	3iij.
Spt. ammon. arom.	..	..	..	..	3ss.
Aque ad	..	..	..	..	3xij.

DEVONSHIRE. (202/10.)

[The solubility of sulphate of soda in water is a little over 1 in 3, but it is insoluble in alcohol; and the presence of the aromatic spirit in this prescription necessarily diminishes the solvent power of the water. A perfect solution cannot be made as the prescription stands.]

##### Re Eye Drops (59/191).

SIR,—I think if "An Old Subscriber" were first to dissolve the boracic acid in three times its weight of boiling water, rub this solution with the extract of belladonna, mix then the castor-oil, finally transfer the whole to a beaker, and apply a gentle heat by means of a water-bath, he would produce a satisfactory result.

This is a method I have employed in dissolving atropine sulphate in castor-oil. Probably in the case in question glycerine or alcohol would answer as well as, or better than, water; but in that case more of the solvent would be required, as boracic acid is more soluble in hot water than in either glycerine or alcohol.

Yours truly,

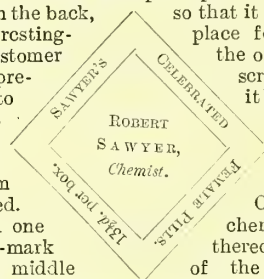
HIRUDO. (204/38.)

##### Chlorodyne.

*Atropia* (35/205) asks:—"When chlorodyne is asked for or prescribed is one justified in dispensing the B.P. preparation (tr. chlorof. et morphinæ)?" [Seeing that the Pharmacopœia does not indicate in any way that the tincture is "chlorodyne," the dispenser should supply the proprietary preparation.]

##### Stamping Prescriptions.

SIR,—I get prescriptions—and no doubt many others do—with innumerable names stamped upon them, and sometimes continued on the back, so that it is a matter of difficulty to find a resting-place for one's own stamp. I had a customer on handing his pre- that he objected to and, further, that liberty for che- stamp prescrip- do. I assured him should be respected. the paper, I found one planted his trade-mark here, right in the middle customer, being a Roman Catholic priest, evidently took it as an insult that his prescription should be made the medium for advertising female pills.



CINNAMON. (55/205.)

##### Recording Dispensing Work.

SIR,—Plenty other means might be adopted. As Mr. James Phillips observes, a waste-book would do well to record repetitions. But opinions and tastes differ, and many prefer to record their repeats in the prescription-book, and I cannot see anything very objectionable in doing so. I never heard of repeats being indexed, so that neither the notation nor the facility of reference is affected. A waste-book would be cheaper, and that is the only advantage.

CINNAMON. (55/205.)

[In regard to this matter, it should be noted that each time a prescription containing a scheduled poison is dispensed, that fact should be duly recorded in the prescription-book.—Ed.]

SIR,—I think "Heder's" method of recording the above a very poor one, and the one by "A Contributor" little better. The former plan would make an unsightly prescription-book, the latter a lot of unnecessary writing. The following is the best method I have ever seen for recording prescriptions, and is all that is required:—

Wednesday, November 30, 1887.

James Smith	..	Mist. 8 oz. Pil ij.	K 19373
Thomas Jones	..	Ung. 3ij.	

Width of book 5 inches. All repeats are entered with the number, then at night all the new ones entered without the



number, so that you can see at a glance how many old and new have been dispensed during the day.

Yours,

NEPENTHE. (61/27.)

#### A Muddy Mixture.

SIR,—The mixture should be quite clear, and not any carbonate of magnesia formed at all, unless "Viridis," like the pilgrim with the peas, takes the trouble to boil it. If any difficulty does occur in dispensing this prescription, the dispenser should test each of the ingredients for impurities.

CINNAMON. (55/205.)

SIR,—If "Viridis" will see that his drugs are all right, and then make his mixture *secundum artem*, I think he will get a perfectly clear solution. The one I dispensed has stood three days and shows no signs whatever of a precipitate yet. Pot. bicarb. and mag. sulph. do not give a precipitate when mixed, unless they are boiled. I cannot understand how "Viridis" has got a muddy mixture unless he has dissolved the salts in hot water.

Yours,

NEPENTHE. (61/27.)

[The ordinary dispensing solution of bicarbonate of potash generally gives an immediate precipitate of carbonate of magnesia when added to the solution of Epsom salts. Some specimens of the bicarbonate, especially when kept for any length of time, also afford the precipitate at once. This is owing to the presence of carbonate, and it is evident, as we supposed, that "Viridis" was working under one or the other of the conditions named.—ED.]

#### Veterinary Dispensing.

SIR,—Permit me to say that the tone of Mr. Leeney's remarks bespeaks a bad cause. I do not intend to return his invective. His deductions, however, are thoroughly untenable and illogical. I disputed his right to ask for information, and he has sought very feebly to maintain it by urging an "admirable spirit" and courtesy to his informants, and "acrimony," "sneering," and "antipathy" to me. His purpose is served. I wish to disclaim the sinister motives imputed to me. The question is not one of courtesy but one of policy.

Your obedient servant,

56 Everton Road, Liverpool, Nov. 28. JAMES PHILLIPS.

#### MISCELLANEOUS INQUIRIES.

200/9. *Tudor*.—Roup Pills.—The following is a useful formula:—

Hydrag. subchlor.	..	..	..	..	1 gr.
Pulv. antimonialis	..	..	..	..	1 "
Pulv. zingiberis	..	..	..	..	1 "
Ext. glycyrrhizæ q.s. ut fiat pilula.					

One pill to be given night and morning.

**Roup Paste.**—Powdered liquorice, 1 oz.; Armenian bole, 1 oz.; cayenne pepper, 1 drachm. Make into a paste with copaiba.

201/11. *W. Adams*.—You will find full particulars regarding how to study for the medical profession in our Educational number, September 17. The first step to take in order to enter the Army Medical Corps is to enlist. Applicants must possess a certain chest measurement, and be otherwise physically sound. If a man is a registered chemist and druggist when he joins, he will be eligible for dispenserships at depôts when they become vacant, and so obtain sergeant's pay. As the members of the corps are subordinate to the medical staff, the chance of advancement is not so great as in other departments of the regular service.

**Turlington.**—Mr. W. C. Turpin, of Middleburg, South Africa, sends particulars of this remedy, which is in use as a domestic medicine in Cape Colony. We have previously given particulars of it, but Mr. Turpin adds that it is sold in 1-oz. phials and is nothing more than tr. benzoini co. B.P.

He sends us one of his labels with directions in Dutch. The following is a translation:—"Dose:  $\frac{1}{2}$  to 1 teaspoonful three or four times a day, to be taken with powdered sugar or the yolk of an egg. Especially recommended in old chronic affections of the chest, consumption, and vomiting of blood. This balsam cannot be taken with liquids such as tea or water, not being miscible with these; on the contrary, its ingredients would separate and lose their curative effects. Externally applied, this balsam cures wounds both recent and old or neglected."

11/206. *Nemo*.—The Register of Chemists and Druggists is published in the early part of every year, but information of changes of address should be sent to the Registrar, 17 Bloomsbury Square, as soon as they occur.

62/204. **Professor Romain's Corn Salve.**—*J. J.* sends us a sample of this preparation, which, he states, is a painless and very effectual corn cure. It is put up in 2-drachm C. D. pill-boxes, and is a hard resinous substance of a bright green colour. It is simply common resin, coloured with sap-green. The directions which are given are:—"Cut box from salve. Make the salve hot by melting, like wax, two drops on brown paper. Put the salve on while hot. Renew every evening if required."

11/203. *S. & S.*—**Dose Slips for Bottles.**—It is the case that these slips as supplied by printers are generally incorrect; they may suit fairly one maker's bottles and not those of another. It is obvious that the average of, say, half a dozen kinds of bottles would not be correct for any. The plan which you should adopt is to measure the bottles which you use, and prepare average slips. These any intelligent printer will reproduce for you. We do not think that you would be satisfied with the measurements by printers.

203/63. *Juvenis*.—**St. Jacob's Oil.**—The following formula is said to give a preparation similar to this:—Oil of sassafras, olive oil, camphor, and chloroform, of each 4 oz.; capsicum, 2 drachms; turpentine, 24 oz. Colour with alkanet.

202/71. *Morphine*.—There is no reason why you should not make *Injectio Morphine Hypodermica* with acetate of morphine instead of starting with the hydrochlorate as directed by the Pharmacopœia. It is understood that the reasons for the roundabout official process are that the acetate is not a common salt of morphine, and it is liable to change on keeping. The acetate which you use should not have more colour than a dull cream shade. Use it in the proportion of 48 grains to the fluid oz., with a trace of free acetic acid to clear the solution.

59/200. *Amicus Veritatis*.—We do not have a formula for *Locock's Lotion for the Skin*, but the following will suit your label:—

Blanched almonds	..	..	..	..	3ij.
Tincture of benzoin (simple)	..	..	..	..	ss.
Chloride of ammonium	..	..	..	..	3j.
Elder-flower water	..	..	..	..	3ij.
Rose water, to	..	..	..	..	3xij.

Beat the almonds in a mortar and make an emulsion with the rose water; dissolve the chloride in the elder-flower water, mix with the emulsion, and add the tincture.

10/201. *Lavender*.—**Lavender Salts.**—Fill the smelling-bottles with crystals of sulphate or bicarbonate of soda, and add a sufficiency of ammoniated alcohol perfumed with oil of lavender.

50/201. *Family Wash*.—Washing fluids are added to the water in which clothes are soaked. A teacupful to a tubful of water.



*Unknown's* apprentice has made a quantity of Lin· Saponis with common yellow soap, with the result that it has become a congealed mass. This unlucky apprentice's experiment was predicted by the poet when he said:—

"Opodeldoo is melting to curd,  
And far on the Caspian Sea  
The pale crescent moon may be heard  
In her hundred and third apogee."

There is no practical means for rendering the liniment fluid. Some common soaps have the property of making water stand up, and this applies in a limited sense to alcoholic solvents. (2) The specimen does not come within the rules of these columns.

22/202. *T. Pennington*.—Piesse's "Perfumery" will give you the information you require. It is published by Longmans & Co.

16/202. *Diok Deadeye*.—You do not tell us the nature of the stains in the red coats. Soldiers use oxalic acid for other than oil stains in their coats.

71/201. *Cinereus* wishes to know How to Reduce 60 o.p. Spirit to 56 o.p. The simplest way is to calculate from the percentage of proof spirit in the respective spirits. The percentages are obtained by adding 100 to the number of degrees over proof, for these degrees indicate the volume plus 100 to which 100 volumes of the spirit must be made up with water in order to reduce it to proof strength. The method of calculating is to multiply the percentage of proof spirit in the dilution required by 100, and divide by the percentage of proof spirit in the spirit taken. This gives the volume of spirit to be taken to make 100 volumes with water. In *Cinereus's* case we have therefore:—

$$\frac{156 \times 100}{160} = 97\frac{1}{2} \text{ volumes of 60 o.p. spirit.}$$

This is to be diluted with water to 100 volumes. The method is applicable to all strengths of spirit provided the proof strength be known, but in the case of spirit under proof strength subtract the number of degrees from 100.

36/202. *Alpha*.—Naismith's Tooth-powder, which is very commonly used in Scotland, is a mixture of precipitated chalk and orris powder coloured with rose pink, and sometimes perfumed with otto of rose. The proportions used are not always the same, but the following is a representative formula:—

Precipitated chalk	..	..	..	1 lb.
Orris powder	..	..	..	2 oz.
Rose pink	..	..	..	1 drachm
Otto of rose	..	..	..	10 drops

Rub the rose pink and otto with an oz. of the chalk, and when no red specks are visible gradually add the rest of the powders and sift.

201/39. *Cordillera*.—A selection of stomachic, astringent, tonic, and febrifuge remedies (plenty of quinine) would be most useful in Chili. There are English chemists in Valparaiso from whom the B.P. preparations can be obtained.

202/61. *K. L. Subscribers*.—Formulæ for Glycerine and Cucumber have been given in the current volume. We have no other formulæ for Carbolicised Wheat-dressing.

205/27. *Equine*.—Horse Condition Powders.—Peroxide of iron, 6 oz.; black sulphide of antimony, 3 oz.; sublimed sulphur, 4 oz.; nitre, 4 oz.; gentian, 6 oz.; liquorice, 4 oz.; fenugreek, ginger, and anise, of each 2 oz. Mix. Dose: A heaped tablespoonful.

32/201. *T. H. H.*—The following formula gives a good and palatable Sauce:—To 4 quarts of bruised tomatoes add 8 oz. of common salt; allow to stand for a day or two, and pass

through a coarse hair sieve. Then boil the juice for a quarter of an hour with 4 oz. of shallots and  $\frac{1}{4}$  oz. of black pepper; now add  $\frac{1}{2}$  oz. each of mace, pimento, ginger, and nutmeg, and  $\frac{1}{4}$  oz. of coriander, and allow the whole to stand beside a fire for an hour. Again strain through the hair sieve and bottle. Tinned tomatoes may be used.

204/45. *Gadus*.—Kaolin is what is generally known as white bole. Spent whiting (sulphate of lime) is not a fertiliser.

204/51. *Athluain*.—The only way to improve your drawers is to get them scraped and repolished. Aniseed Cough Balsam.—The following gives a comparatively clear mixture:—

Oil of anise	..	..	..	..	3ss.
Spirit of chloroform	..	..	..	..	5j.
Tincture of cinnamon	..	..	..	..	3j.
Paregoric elixir	..	..	..	..	3iv.
Tincture of senega	..	..	..	..	3ss.
Oxymel of squill	..	..	..	..	3vj.
Syrup of tolu	..	..	..	..	3vij.
Caramel	..	..	..	..	3ss.

Dissolve the oil in the spirit of chloroform, add the tincture of senega and then the other tinctures, shaking well, and add this mixture gradually and with constant shaking to the syrups and caramel previously mixed.

(3) You should inquire about the "Ross" light, of which we gave particulars in our last volume, page 771.

200/31. *J. W. B.*—Flavour for Cachous:—Oil of cloves, 5j.; oil of cinnamon and oil of wintergreen, of each 5 drops. Mix. Cough Lozenges.—The following formula makes a good lozenge:—Powdered cubebs, powdered ipecac., and powdered tragacanth, of each 5j.; extract of liquorice and powdered sugar, of each 5vij.; oil of anise, 3ss. Mix, and make into lozenges of 15 grs. each.

205/46. *North Jerne*.—Try Potter & Clarke for the herbs. The prescription has frequently been referred to by us.

205/54. *Pharmacista*.—Syrup of Fox's Lungs was originally made from the lungs of the fox. A substitute is sold in Norwich which has the following composition:—

Liquorice	..	..	..	..	2½ oz.
Ipecacuanha wine	..	..	..	..	4 oz.
Sugar	..	..	..	..	8 lbs.
Water	..	..	..	..	70 oz.

Dissolve the liquorice in the water, add the sugar, dissolve, strain, and add the wine.

Red Colour for Carboys.—(1) Potassium sulphocyanide, 10 grs.; liq. ferri perchlor. fort., m x.; water, 1 gallon (evanescent but beautiful). (2) Cobalt nitrate, 1 oz.; carbonate of ammonia, q.s.; water, 1 gallon. Dissolve the cobalt nitrate in 2 pints of water, and add a strong solution of the ammonia salt until the precipitate formed is re-dissolved. Then dilute with the rest of the water. This is permanent.

49/37. *E. M.*—You should read the well-known lectures on diabetes by Dr. Pavy, published by Churchill.

211/60. *S. & G.*—Isinglass is regarded as a pure form of gelatine, and there are no reliable chemical tests to distinguish between them; but isinglass exhibits a microscopic structure which may be utilised in the examination of the two bodies.

37/204. *W. J. Dixon*.—Crocus of Antimony is made by fusing equal parts of black antimony and nitre. It is impossible to give it a chemical formula, for it is a mixture of teroxide, oxysulphide, and tersulphide of antimony; and sulphide, sulphate, and antimoniate of potash in variable proportions.